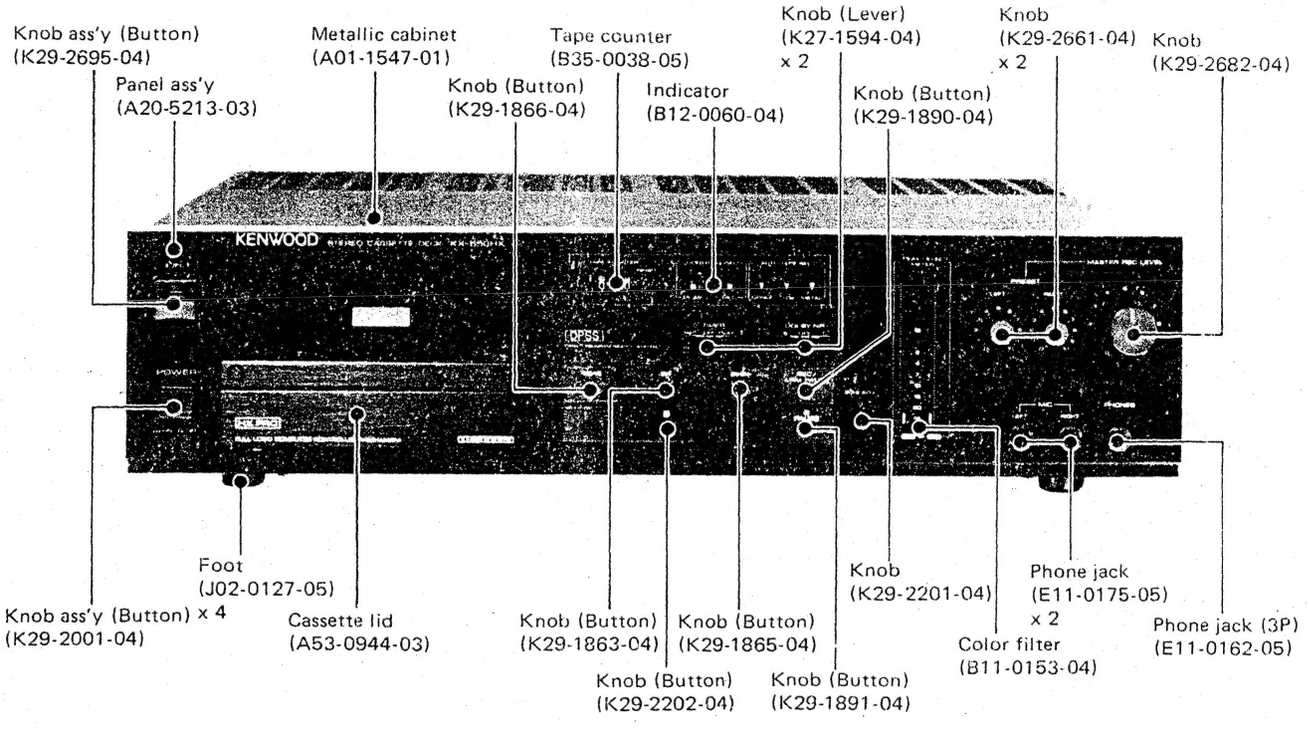
STEREO CASSETTE DECK

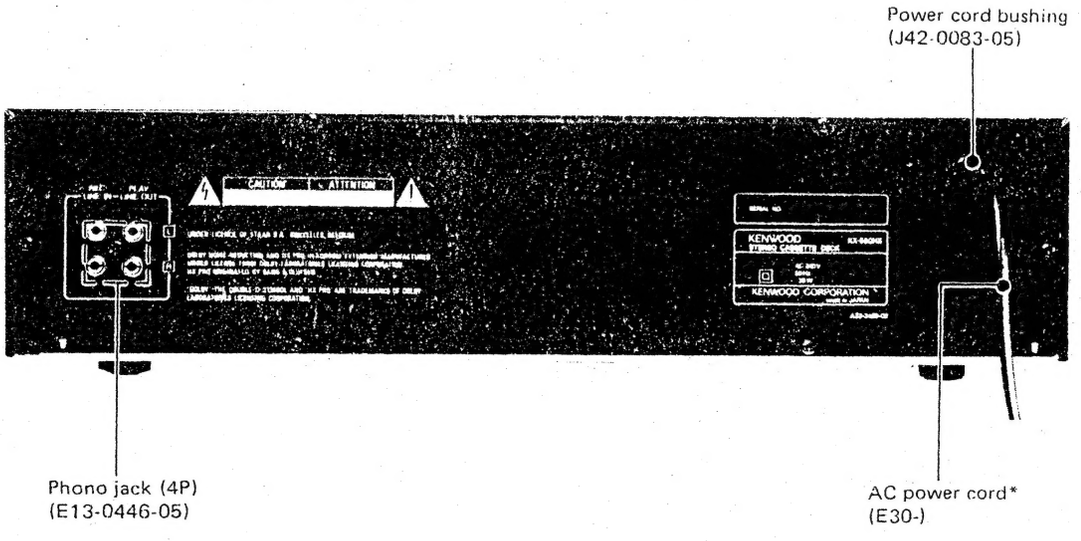
KX-550HX

SERVICE MANUAL

KENWOOD

B51-3224-00 (O) 1088



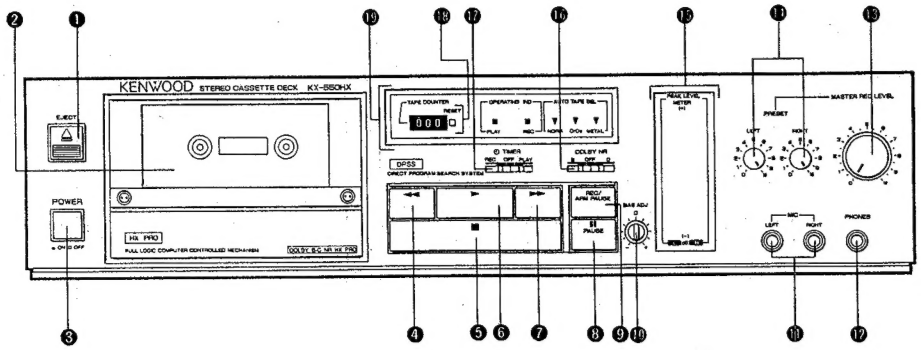


*Refer to the parts list on page 33.

CONTENTS/CONTROLS, INDICATORS AND CONNECTORS

CONTROLS, INDICATORS AND CONNECTORS

Numbers in the front of names correspond that in the diagram.



❶ Eject key (▲)
Pressing this key opens the cassette holder.

❷ Cassette holder
When the eject key is pressed, this holder opens. To close it, push the left upper section of the holder until it locks.

❸ POWER switch
Press this switch to turn the power ON. Pressing again turns the power OFF.

❹ Rewind key (◀◀)
Press this key to rewind the tape from right to left at high speed.

❺ Stop key (■)
Press this key to stop the tape travel.

❻ Play key (▶)
Press this key to forward the tape at fixed speed and start playback; the play indicator (▶) lights.

❼ Fast forward key (▶▶)
Press to advance the tape rapidly (from left to right).

❽ PAUSE key (❚❚)
To interrupt recording or playback momentarily, press this key. When this key is pressed during playback, the play indicator flickers and the playback is interrupted momentarily. When this key is pressed during recording, the record indicator lights and the play indicator blinks so that the recording is interrupted. To release the play-pause mode, press the play key and to release the record-pause mode, press the REC/ARM PAUSE key.

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CONTROLS, INDICATORS AND CONNECTORS

❾ REC/ARM PAUSE key
Press this key to start recording. It is not necessary to press the play key simultaneously since this unit provides the one-touch recording system. At this time, the record and play indicators light.
When this key is pressed again during recording, about 4 seconds non-recorded section is made and the tape travel will stop temporarily.

❿ BIAS ADJ. knob
The bias current can be varied continuously with this according to the tape to be used.

⓫ MIC jacks (L/R)
Plug the microphones into these jacks when recording with microphones; L for left channel and R for right channel. Use the low impedance (600 ohms) microphones.

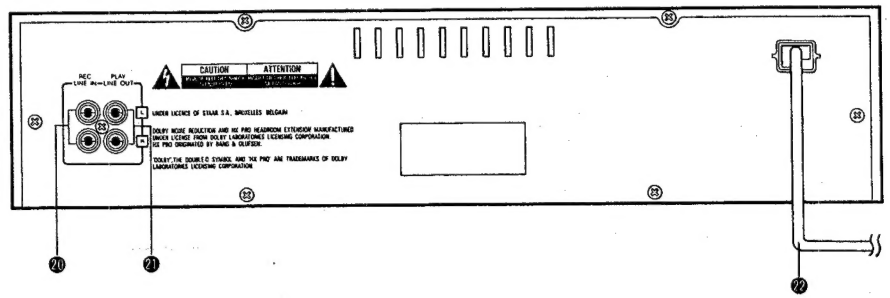
⓬ PHONES jack
Plug the stereo headphones into this jack to monitor recordings or tape playback.

⓭ MASTER REC LEVEL control knob
Adjust the recording input level with this knob. Left and right channel levels are varied simultaneously.

⓮ PRESET record level knobs
The signals for the left and right channels are adjusted independently with these knobs.

⓯ PEAK LEVEL METERs
This indicates the peak values of the input levels when recording or output levels when playback.

Note:
When the microphones are connected, the signal input from the LINE IN terminals are automatically cancelled. Disconnect the microphones before recording from LINE sources.



⓰ DOLBY NR select switch
Set this switch to B or C position when playback the tape recorded with Dolby NR circuit or when recording with Dolby NR circuit.

⓱ TIMER standby switch
Use this switch along with an audio timer when an unattended recording or timer-playback is performed. Set this switch to the REC position for unattended recording, to the PLAY position for timer-playback, and **set to OFF when the timer is not used.**

⓲ TAPE COUNTER and reset button
The TAPE COUNTER provides a means of locating passages on the tape. When starting a recording, set the counter 000 by depressing the reset button.

⓳ Display window
According to the operation mode, each indicator lights or blinks.

⓴ LINE IN/REC terminals
Connect the Tape Rec terminals of your amplifier, etc. to these terminals using provided audio cables.

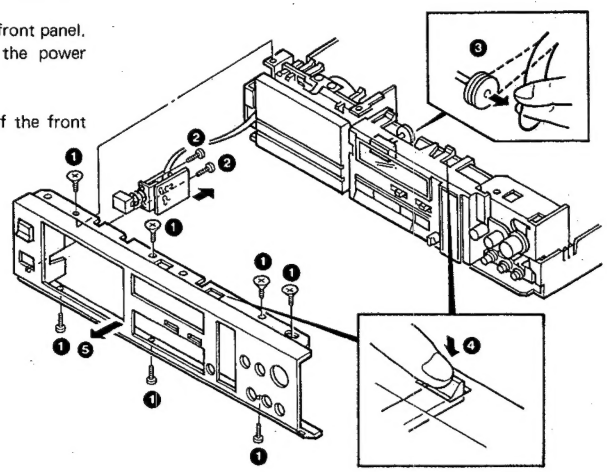
㉑ LINE OUT/PLAY terminals
Connect the Tape Play or AUX terminals of your amplifier, etc. to these terminals using provided audio cables.

㉒ Power cord
Plug this into the wall outlet or AC outlet of the amplifier, etc.

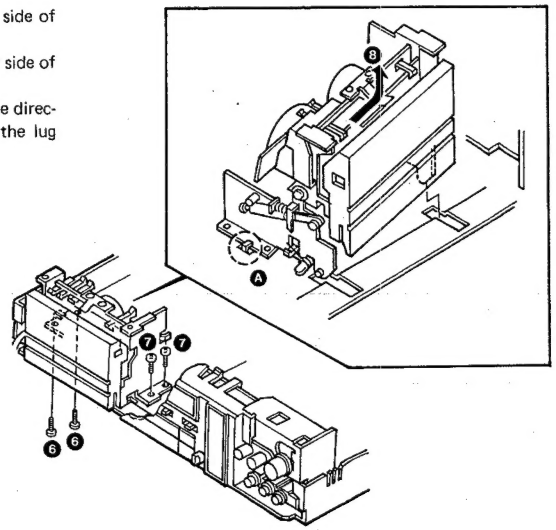
DISASSEMBLY FOR REPAIR

REMOVING THE FRONT PANEL, MECHANISM ASS'Y, MAIN UNIT, AND FRONT NOSE UNIT (ESCUTCHEON)

1. Remove the screw at the side of the case.
2. Remove the two screws at the rear of the case, and remove the case.
3. Remove the seven screws (❶) retaining the front panel.
4. Remove the two screws (❷) retaining the power switch and take it out.
5. Take off the counter belt (❸).
6. Remove the two lug located on the top of the front panel (❹).
7. Take the front panel off (❺).



8. Remove the two screws (❻) retaining the left side of the mechanism ass'y (D40-0560-05).
9. Remove the two screws (❼) retaining the right side of the mechanism ass'y.
10. Take the mechanism ass'y out by pulling it in the direction of the arrow (❽) paying attention to the lug (Ⓐ).



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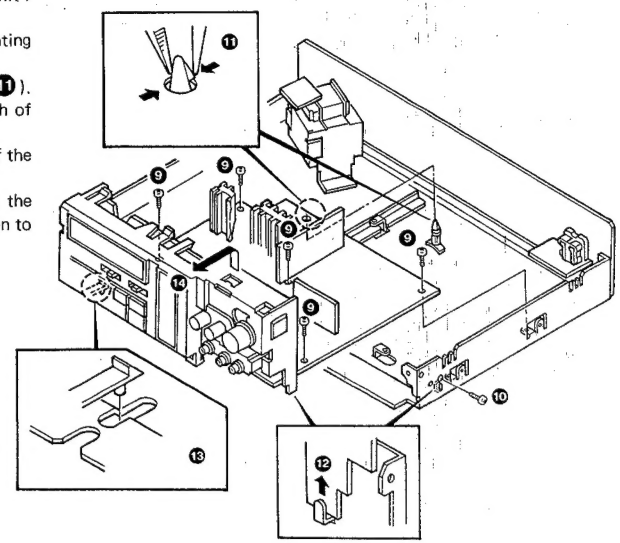
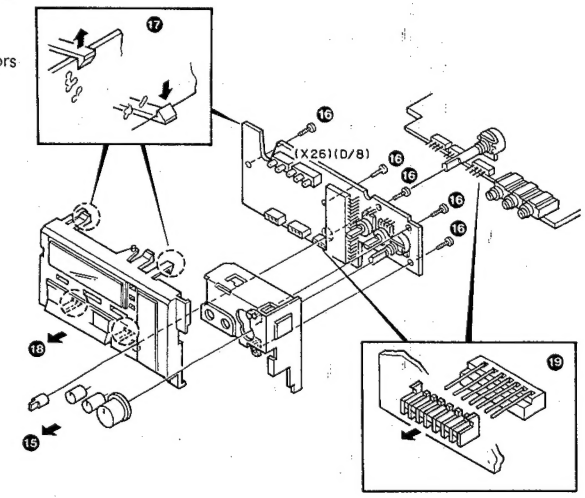
DISASSEMBLY FOR REPAIR

11. Remove the five screws (❾) retaining the main unit : CASSETTE UNIT (X26-1172-71) (A/8).
12. Remove the screw (❿) retaining the unit mounting hardware, located on the right side of the chassis.
13. Take out the unit holder retaining the main unit (⓫).
14. Take the unit mounting hardware out of the notch of the chassis (⓬).
15. Remove the protrusion located on the lower side of the escutcheon from the chassis (⓭).
16. Take the front nose section out by pulling it in the direction of the arrow (⓮) paying close attention to it.



17. Take the four knobs off (⓯).
18. Remove the five screws (⓰) retaining the front nose unit : CASSETTE UNIT (X26-1172-71)(D/8).
19. Remove the four lugs located on the top and bottom of the escutcheon (⓱).
20. Take off the escutcheon (⓲).
21. Disconnect the front nose unit from the connectors of the main unit (⓳).
22. Now the front nose unit can be completely removed.



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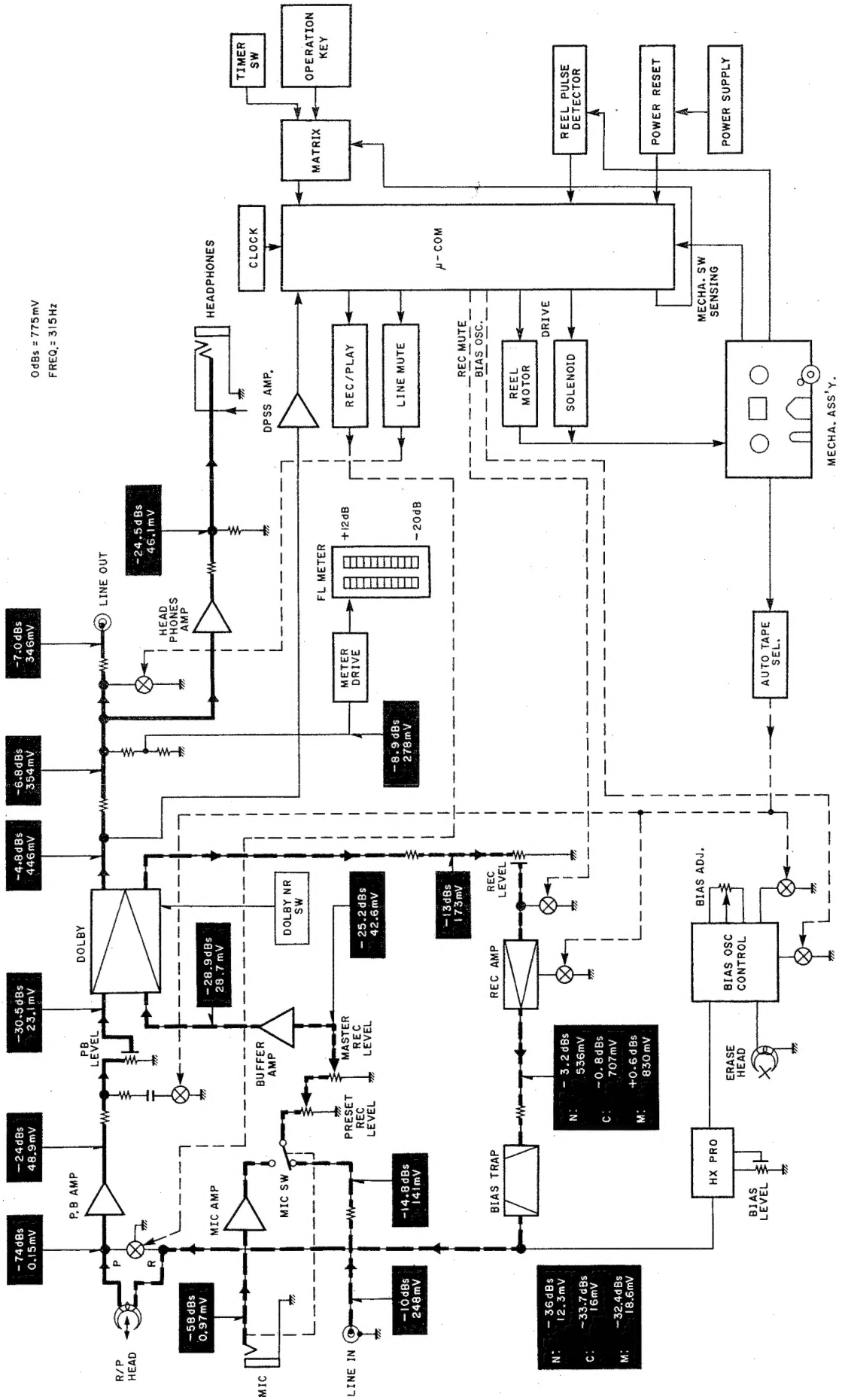
BLOCK/LEVEL DIAGRAM



CIRCUIT DESCRIPTION

Description of components

CASSETTE UNIT (X26-1172-71)

Component	Use/Function	Operation/Condition/Compatibility
IC1	Head select switch	Controlled by the signal output from R/$\overline{P}$ control pin 12 of the microprocessor (IC8) and the signal output from $\overline{R}$/P control pin 4 of the inverter (IC7). Mode / IC1 pins 1, 14 / IC1 pins 6, 9 REC, REC PAUSE / H / L OTHERS / L / H H : 5V L : 0V
IC2	Playback equalizer amp	
IC3	Microphone amp	
IC4	Recording equalizer amp	
IC5	+ 15V power supply	Stabilized power supply for signal circuit amp.
IC6	Reel motor drive	
IC7	Inverter	Control signal logic inversion, and microprocessor clock oscillator.
IC8	Microprocessor	
IC9	Level meter drive	
Q1,Q2	Time constant select for playback	ON when a CrO_2 or Metal tape is loaded.
Q3,Q4	Playback mute	ON when in REC or REC PAUSE mode.
Q5	Dolby R/P select	OFF when in REC or REC PAUSE mode. ON when in other modes.
Q6	+ 12.5V power supply	Stabilized power supply for Dolby circuit.
Q7,Q8	MPX filter switch	OFF when Dolby is deactivated. ON when Dolby B/C is activated.
Q9,Q10	Record peaking frequency select switch	OFF when a Metal tape is loaded. ON when a Normal or CrO_2 tape is loaded.
Q11,Q12	Recording equalizer select switch	ON when a CrO_2 tape is loaded. OFF when a Normal or Metal tape is loaded.
Q13,Q14	Recording equalizer select switch	ON when a Metal tape is loaded. OFF when a Normal or CrO_2 tape is loaded.
Q15,Q16	Record mute	OFF when in REC or REC PAUSE mode. ON when in other modes.
Q17	DPSS sensor	ON when in STOP or CUE mode. OFF when in other modes.
Q18,Q19	DPSS amp	
Q20	DPSS comparator	
Q21	Auto tape selector	ON when a Metal tape is loaded. OFF when a Normal or CrO_2 tape is loaded.
Q22	Auto tape selector	ON when a CrO_2 tape is loaded. OFF when a Normal or Metal tape is loaded.
Q23,Q24	Line mute	ON when in STOP, FF, REW, PLAY or PAUSE mode. OFF when in other modes.
Q25,Q26	Headphone amp	
Q27	Bias oscillator level control	ON when a Normal or CrO_2 tape is loaded. OFF when a Metal tape is loaded.
Q28	Bias oscillator level control	ON when a Normal tape is loaded. OFF when a CrO_2 or Metal tape is loaded.
Q29	Bias ON/OFF switch	OFF when in REC or REC PAUSE mode. ON when in other modes.
Q31	+ 12V power supply	For cassette mechanism drive, + 12V stabilized power supply.
Q32	+ 5.6V power supply	Power supply for digital circuits, such as the microprocessor, etc.
Q33,Q34	Reset circuit	Outputs a low signal, for the transition when POWER is turned ON or OFF, to reset the microprocessor.
Q35	Capstan motor drive	ON when in REC, REC PAUSE or PLAY mode. OFF when in other modes.
Q36	Line mute drive	OFF when in PLAY, REC or REC PAUSE mode. ON when in other modes.
Q37	REC mute drive	OFF when in REC or REC PAUSE mode. ON when in other modes.
Q39	Reel pulse detector	Take-up pulse.
Q40	Solenoid drive	ON when kicked, OFF when in other modes.
Q41	Solenoid drive	ON when solenoid is driven, OFF when in other modes.
Q42,Q43	Buffer amp	

BIAS OSC UNIT (X87-1190-00)

Component	Use/Function	Operation/Condition/Compatibility
IC1	HX-PRO IC	
Q1	Bias oscillator	Bias oscillator for erase head.
Q2	Bias oscillator control	Bias oscillator level control for recording.

DOLBY UNIT (W02-0693-05)

Component	Use/Function	Operation/Condition/Compatibility
IC1	Dolby B/C IC	

CIRCUIT DESCRIPTION

DOLBY HX-PRO SYSTEM

Improvement of Bias with the Dolby HX-PRO System

The DOLBY HX-PRO system is designed to vary the AC bias so that the bias components which are affected by the audio signal can be compensated sequentially. This system is used to control the bias in the servo system so that the effective bias amount (consisting of the "AC bias" and "audio signal") which is actually applied to the head is controlled at a fixed level.

When this system is used, the low and high frequency adjustments, which respectively require an appropriate compromise so that the optimum recording frequency response of a single frequency is obtained, are made quite easily.

Also, the output drop due to self-bias at high frequencies is eliminated. This results in a flat response over a widened high frequency range. **Fig. 1** shows an example of the improvement in the frequency response.

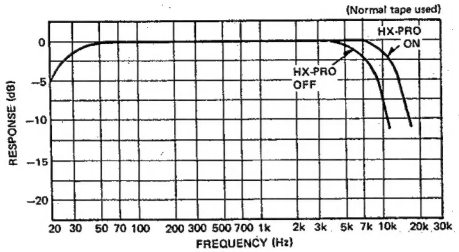


Fig. 1 Improvement example of the tape output frequency response with Dolby HX-PRO

Outline of μPC1297CA (X87-1190-00 : IC1)

Dolby HX-PRO System and Construction/Operation of the μPC1297CA

The system construction diagram is shown in **Fig. 2** and the outline of operation is shown in **Fig. 3**. The effective bias is detected at the edge of the tape head. The high-frequency components (more than 10kHz) are extracted from the detected signal by the filter, and converted into a DC voltage. The resultant voltage is compared with the reference voltage for setting the bias amount, and the AC bias is controlled by the VCA (Voltage Controlled Amplifier) circuit so that a constant bias is obtained. By switching the reference voltage, the bias level can be set for each type of tape used.

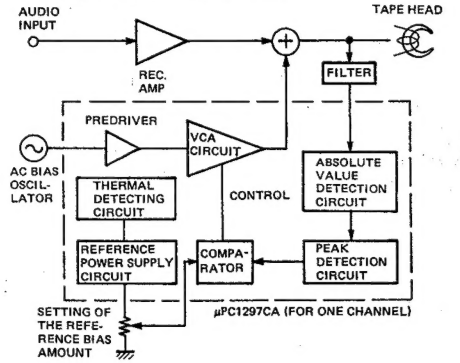


Fig. 2 System configuration of Dolby HX-PRO

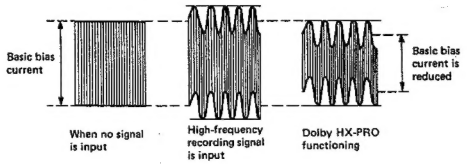


Fig. 3 Operation principle of Dolby HX-PRO

Dolby HX-PRO System Circuit

The μPC1297CA is an IC which control the effective bias amount that is applied to the recording head in the tape deck. "HX" stands for Headroom Extension. With this system, the dynamic range is greatly extended to the high frequencies, while the high frequency response range is improved.

Features

- Wider power voltage range. Vcc = 8~15~18V.
- Two-channel Dolby HX-PRO system provided.
- Lower 2nd harmonics distrotion. −70dB TYP.
- Bias level can be set for each type of head used.
- Thermal detecting protection circuit built-in.
- Packaged in an 18-pin shrink DIP (dual inline package).

Explanation of pin name

Pin No.	Symbol	Pin name	Pin No.	Symbol	Pin name
1	VST	Reference power supply pin	10	VIN(O)	Bias oscillator input pin
2	VR1	Comparator reference pin 1	11	VOUT22	VCA output pin 21
3	VIN(R)1	Signal input pin 1	12	VOUT21	VCA output pin 22
4	PH1	Peak hold capacitor pin 1	13	COUT2	Comparator output pin 2
5	CIN1	Comparator input pin 1	14	CIN2	Comparator input pin 2
6	COUT1	Comparator output pin 1	15	PH2	Peak hold capacitor pin 2
7	VOUT11	VCA output pin 11	16	VIN(R)2	Signal input pin 2
8	VOUT12	VCA output pin 12	17	VR2	Comparator reference pin 2
9	GND	GND (ground) pin	18	Vcc	Power supply pin

Microprocessor M50757-403SP (X26-1172-71 : IC8)

- **Terminal connection diagram**

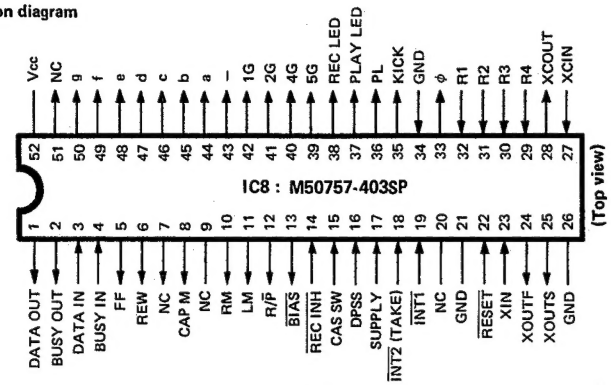


Fig. 4

- **Explanation of terminals**

Terminal No.	Terminal name	I/O	Functions
1	DATA OUT	–	Not used.
2	BUSY OUT	–	Not used.
3	DATA IN	I	Serial data input for sync.
4	BUSY IN	I	BUSY data input for sync.
5	FF	O	Reel motor drive. "H" in FWD direction, "L" in other directions.
6	REW	O	Reel motor drive. "H" in RVS direction, "L" in other directions.
7	NC	–	Not used.
8	CAP M	O	Capstan/Reel motor voltage select. "L" when ON.
9	NC	–	Not used.
10	RM	O	REC MUTE output. "H" when REC MUTE ON.
11	LM	O	MUTE output. "H" when MUTING ON.
12	R/$\overline{P}$	O	REC/PLAY select. "H" when in Recording mode.
13	$\overline{BIAS}$	O	Bias oscillator ON/OFF. "H" when Bias OFF.
14	$\overline{REC\ INH}$	I	Recording inhibition input. "H" when in Recording inhibition.
15	CAS SW	I	Cassette half detect input. "H" when half detected.
16	DPSS	I	Inter-music detect when DPSS used.
17	SUPPLY	I	Supply reel pulse input (for linear counter).
18	$\overline{INT2}$ (TAKE)	I	Take-up reel pulse input.
19	$\overline{INT1}$	–	Not used (pull-up).
20	NC	–	Not used.
21	GND	–	Ground terminal.
22	$\overline{RESET}$	I	Reset input. "L" when reset.
23	XIN	I	System clock input (4MHz).
24	XOUTF	–	Not used.
25	XOUTS	–	Not used.
26	GND	–	Ground terminal. (0V).
27	XCIN	–	Not used (pull-up).
28	XCOUT	–	Not used (pull-down).
29	R4	I	Dynamic key input.
30	R3	I	Dynamic key input.
31	R2	I	Dynamic key input.
32	R1	I	Dynamic key input.
33	ϕ	–	Not used.

Terminal No.	Terminal name	I/O	Functions
34	GND	–	Ground terminal (0V).
35	KICK	O	Mechanism-plunger starting. "H" when plunger ON.
36	PL	O	Mechanism-plunger preservation. "H" when preservation ON.
37	PLAY	O	PLAY LED drive "H" when ON.
38	REC	O	REC LED drive "H" when ON.
39	5G	O	Digit output for FL, KEY input. "H" when FL ON.
40	4G	O	Digit output for FL, KEY input. "H" when FL ON.
41	2G	O	Digit output for FL, KEY input. "H" when FL ON.
42	1G	O	Digit output for FL, KEY input. "H" when FL ON.
43	–	–	Not used. (pull-down).
44~50	a~g	–	Not used.
51	NC	–	Not used.
52	Vcc	–	5V.

- **Key matrix**

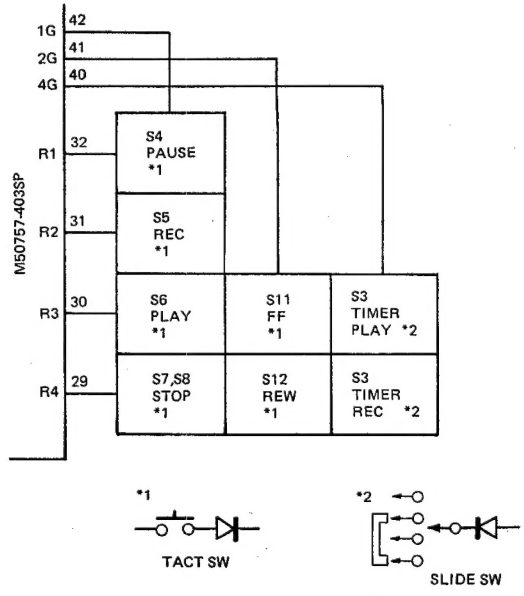


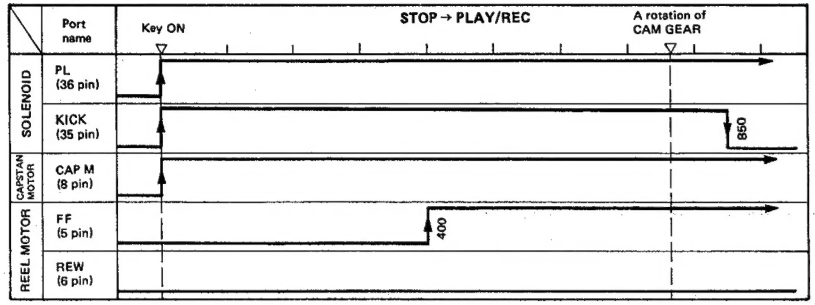
Fig. 5

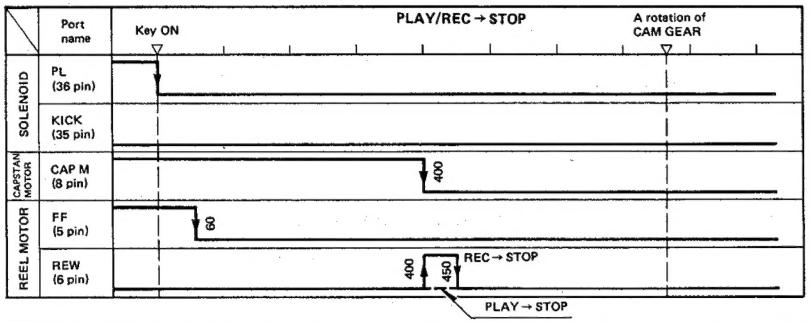
CIRCUIT DESCRIPTION

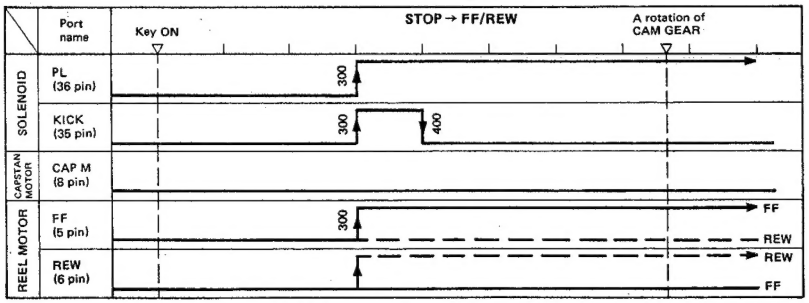
CIRCUIT DESCRIPTION

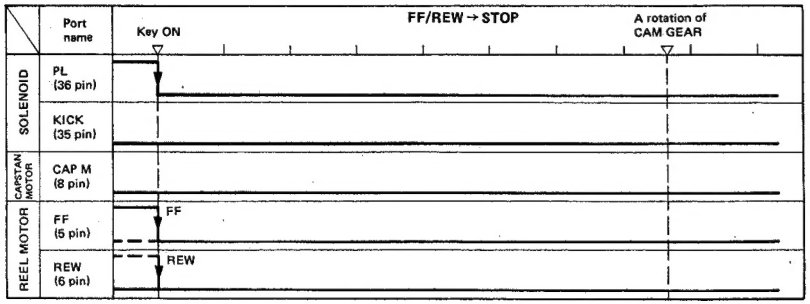
● Timing chart

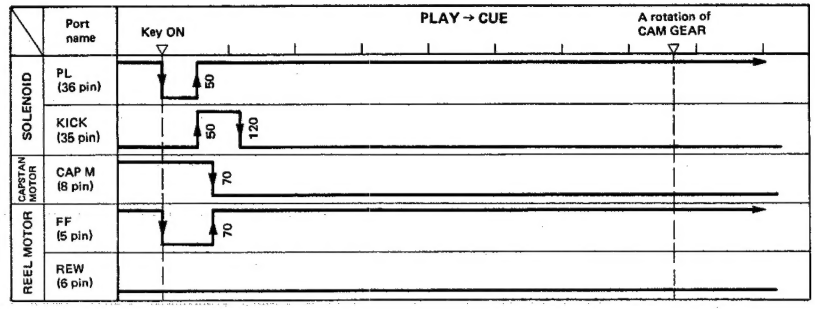
(unit : msec.)

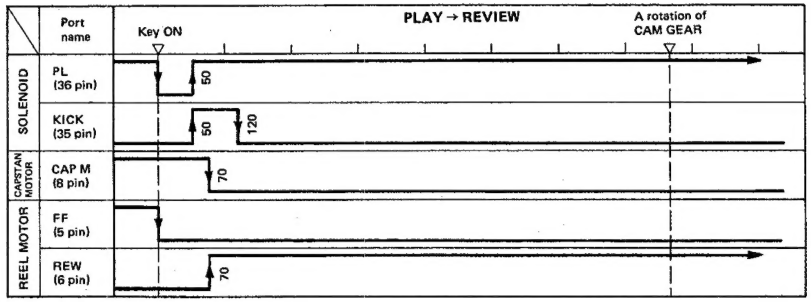


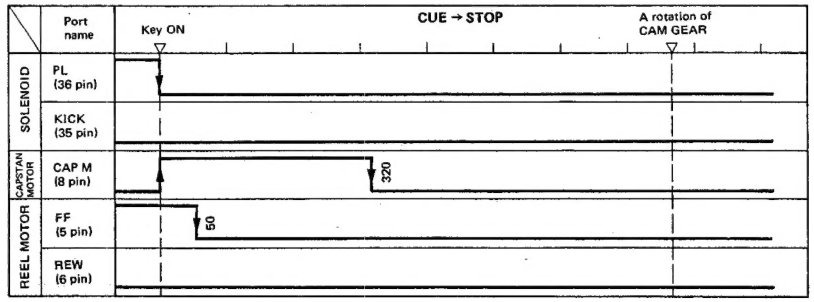


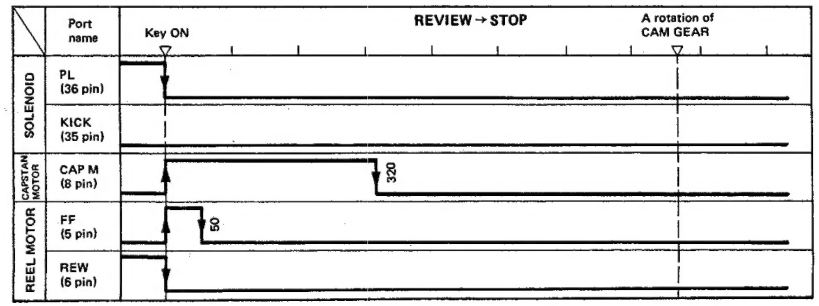












MECHANISM DESCRIPTION

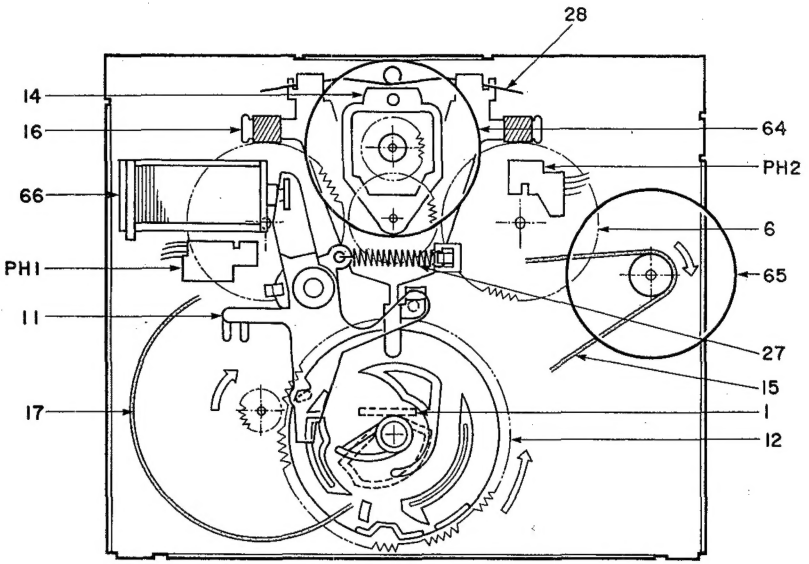


Fig. 1 Parts layout (Rear side view)

Pinch Roller Pressure	250~350g
Take-up Torque	30~70g·cm (2.5V)
FF, REW Torque	90~180g·cm (3.8V)
Back Tension Torque	2~6g·cm

Note : Numbers in the figures correspond that in the parts list on page 37.

Mechanism operation description

1. STOP to PLAY/REC Operation (See Fig. 2 to Fig. 5)

1–1. Press the PLAY key.

1–2. By a signal from the microprocessor, the CAPSTAN MOTOR (65) rotates, and at the same time, the SOLENOID (66) turns ON.

1–3. PLAY ARM (11) swings in the direction of the arrow ➡ Ⓐ.

1–4. The pin Ⓑ of PLAY ARM is released from the stopper section Ⓒ of the CAM GEAR (12).

1–5. The CAM GEAR rotates slightly and engages with the gear of the FLYWHEEL (17).

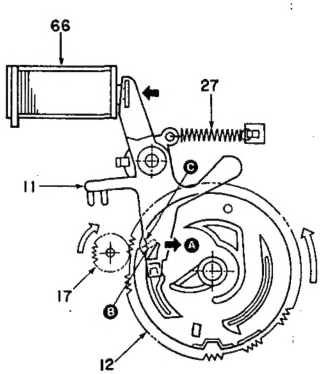


Fig. 2 (Rear side view)

MECHANISM DESCRIPTION

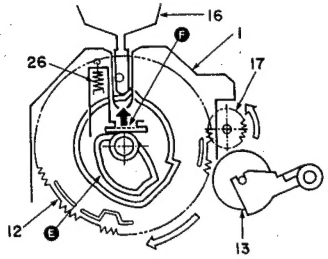


Fig. 3 (Front side view)

1–6. The bending section (F) of the HEAD BASE (1) is lifted by the cam (E) of the CAM GEAR and begins moving upward.

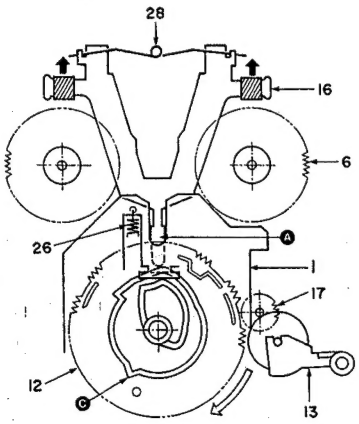


Fig. 4 PLAY status (Front side view)

1–7. The boss (A) of the BRAKE ASS'Y (16) is lifted up by the outer cam (C) of the CAM GEAR, and the brake of the REEL BASE ASS'Y (6) releases.

1–8. When the CAM GEAR is rotated by about 3/4 of a revolution, the pin (B) of PLAY ARM comes into contact with the stopper (D) of the CAM GEAR.

1–9. At this time, the non-tooth section of the CAM GEAR reaches the gear of the FLYWHEEL, and the CAM GEAR stops rotating.

1–10. When the rotation of the CAM GEAR stops, the HEAD BASE comes into the PLAY position.

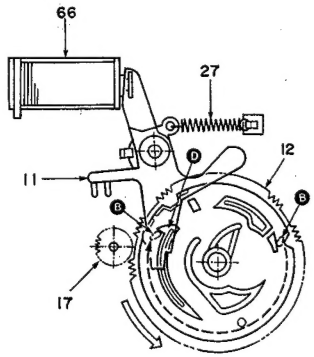


Fig. 5 (Rear side view)

2. PLAY/REC to STOP Operation (See Fig. 6, Fig. 7)

2–1. Press the STOP key.
2–2. By a signal from the microprocessor, the SOLENOID (66) turns OFF.
2–3. The PLAY ARM (11) is swung in the direction of the arrow ⬅ Ⓐ by the SPRING (27), and the pin Ⓑ is released from the stopper Ⓓ.
2–4. The CAM GEAR is slightly rotated by the HEAD BASE (1) in the direction of the arrow ⇨.

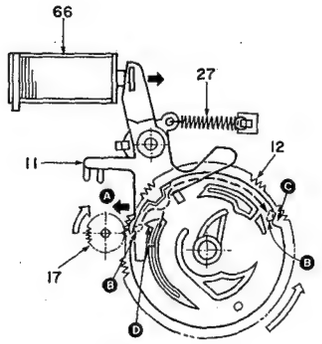


Fig. 6 (Rear side view)

2–5. The CAM GEAR engages with the gear of the FLY-WHEEL (17) and continues rotating.
2–6. When the pin Ⓑ of the PLAY ARM comes into contact with the stopper Ⓒ of the CAM GEAR, the CAM GEAR stops rotating.
2–7. By a signal from the microprocessor, the CAPSTAN MOTOR (65) stops and the deck enters STOP mode.
2–8. When the deck status changes from REC mode to STOP mode, the REEL MOTOR (64) rotates for 50msec. in the REW (rewind) direction to reverse the tape a little.

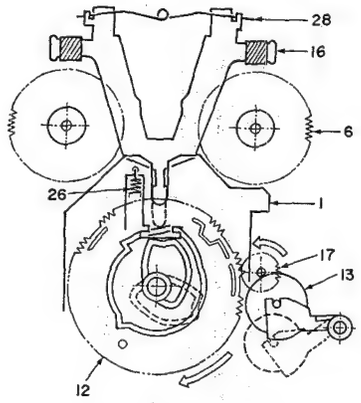


Fig. 7 (Front side view)

3. STOP to FF/REW Operation (See Fig. 8)

3–1. By a signal from the microprocessor, the SOLENOID (66) turns ON. At the same time, the REEL MOTOR (64) starts rotating in the correct direction.
(FF : ⇨CW, REW : ⇨CCW)
3–2. The PLAY ARM (11) swings in the direction of the arrow ➡ Ⓒ, and the BRAKE ASS'Y (16) is raised up by the pin Ⓓ.
3–3. According to the rotating direction of the REEL MOTOR, the IDLER ASS'Y (14) is swung in the appropriate direction.
(FF mode : ➡ Ⓑ, REW mode : ➡ Ⓐ)
3–4. When the gear of the IDLER ASS'Y engages with the gear of the REEL ASS'Y (6), the deck enters FF/REW operation mode.

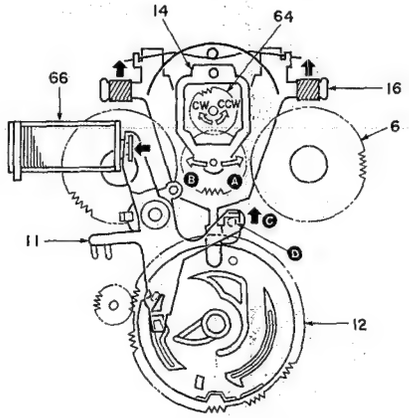


Fig. 8 (Rear side view)

4. PLAY to CUE/REVIEW (REV) Operation (DPSS) (See Fig. 9, Fig. 10)

4–1. Press the FF/REW key during PLAY.
4–2. By a signal from the microprocessor, the SOLENOID (66) turns OFF.
4–3. The PLAY ARM (11) is swung in the direction of the arrow ⬅ Ⓐ by the SPRING (27), the pin Ⓑ is released from the stopper Ⓓ.
4–4. After 50msec, the SOLENOID is turned ON again.
4–5. The pin Ⓑ of PLAY ARM passes by the internal orbit, and then comes into contact with the stopper Ⓒ of the CAM GEAR.
4–6. The CAM GEAR stops rotating at a position where the HEAD BASE (1) is lowered to that position.
4–7. The PINCH ROLLER (13) is released from the CAPSTAN in accompanied with lowering movement of the HEAD BASE.
4–8. After a while, the CAPSTAN MOTOR (65) stops rotating, and at the same time, the REEL MOTOR (64) rotates in the appropriate direction (FF/REW) to activate the "CUE" and "REVIEW" operations.

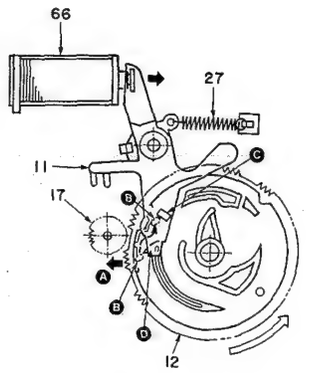


Fig. 9 (Rear side view)

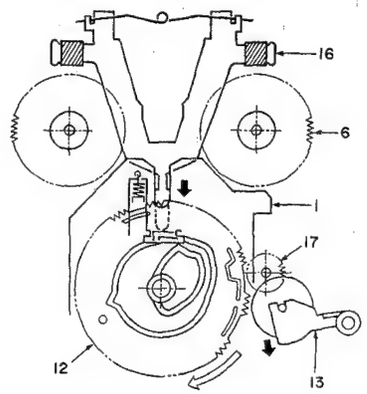


Fig. 10 CUE/REV status (Front side view)

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE TAPE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION		TAPE: NORMAL, DOLBY: OFF, INPUT: LINE				0dBs=0.775V	
I REC/PLAY HEAD							
[1]	DEMAGNETIZATION	–	–	POWER: OFF Remove the cassette door.	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagnetizer.	
[2]	CLEANING	–	–	PLAY	REC/PLAY head erase head, capstan, pinch roller.	Clean the REC/PLAY head erase head, capstan and pinch roller using a cotton swab slightly damped with alcohol.	
[3]	AZIMUTH	(A) MTT-114 10kHz,-10dB	(B)	PLAY	Azimuth adjustment screw	Maximum output.	(a)
II DC MOTOR							
(1)	TAPE SPEED	(A) MTT-111 3kHz	(B)	PLAY	Trimming potentiometer in the DC motor	Adjust the tape speed so that a 3kHz signal is produced at the center of the tape.	(b)
III PC BOARD (X26-117X-XX, X87-1190-00)							
<1>	PLAYBACK LEVEL	(a)MTT-150 400Hz	(B)	PLAY	(X26-117X-XX) VR1 (L) VR2 (R)	Output level: -4.8dBs	
		(b)MTT-256 315Hz				Output level: -7.5dBs	
		(c)MTT-256U 315Hz				Output level: -3.5dBs	
<2>	BIAS CURRENT	(A) 1kHz,-30dBs 10kHz,-30dBs	(B)	Adjust REC LEVEL VR (MASTER,PRESET) so that the REC monitor output becomes -27dBs at 1kHz, then record and reproduce signal of 1kHz and 10kHz in alternation.	(X87-1190-00) VR1 (L) VR2 (R)	Adjust the bias current adjusting VR so that the playback level of the 10kHz signal is +0.5dB higher than that of the 1kHz signal when recording a 1kHz signal and a 10kHz signal alternately.	
<3>	RECORD LEVEL	(A) 1kHz,-30dBs	(B)	Record and reproduce a 1kHz signal under the conditions set in <2>	(X26-117X-XX) VR3 (L) VR4 (R)	Adjust the variable resistors so that a playback level of -27dBs is obtained.	

REGLAGE

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU MAGNETO -PHONE A CASSETTE	POINTS DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION DU MAGNETOPHONE		TAPE: NORMAL, DOLBY: OFF, ENTREE: LINE				0dBs=0.775V	
I TETE D'ENREGISTREMENT/LECTURE							
[1]	DEMAGNETISATION	–	–	POWER: OFF Eloigner la porte.	Tête D'ENREGISTREMENT/ LECTURE	Demagnétiser la tête D'ENREGISTREMENT/LECTURE avec un démagnétiseur de tête.	
[2]	NETTOYAGE	–	–	PLAY	Tête D'ENREGISTREMENT/ LECTURE tête d'effacement, cabestan, galetpresseur.	Nettoyer la tête D'ENREGISTREMENT/LECTURE la tête d'effacement, le cabestan et le galetpresseur avec un coton-tige légèrement imbibé d'alcool.	
[3]	AZIMUT	(A) MTT-114 10kHz.-10dB	(B)	PLAY	Vis d'azimut	Sortie maximer.	(a)
II MOTEUR CC							
(1)	VITESSE DE DEFILEMENT	(A) MTT-111 3kHz	(B)	PLAY	Résistance ajustable du moteur CC	Régler la vitesse de bande de façon qu'un signal de 3kHz soit produit au centre de la bande.	(b)
III PLAQUE IMPRIMEE (X26-117X-XX, X87-1190-00)							
<1>	NIVEAU DE LECTURE	(a) MTT-150 400Hz	(B)	PLAY	(X26-117X-XX) VR1 (G) VR2 (D)	Niveau de sortie: -4,8dBs	
		(b) MTT-256 315Hz				Niveau de sortie: -7,5dBs	
		(c) MTT-256U 315Hz				Niveau de sortie: -3,5dBs	
<2>	COURANT DE POLARISATION	(A) 1kHz.-30dBs 10kHz.-30dBs	(B)	Régler REC LEVEL VR (MASTER,PRESET) de façon que la sortie de moniteur REC soit de -27dBs à 1kHz, puis enregistrer et reproduire des signaux de 1kHz et 10kHz en alternance.	(X87-1190-00) VR1 (G) VR2 (D)	Ajuster le courant de polarisation en ajustant VR pour que le niveau de lecture du signal 10kHz soit de +0,5dB supérieur à celui du signal 1kHz lors de l'enregistrement d'un signal 1kHz et d'un signal de 10kHz alternativement.	
<3>	NIVEAU D'ENREGISTREMENT	(A) 1kHz.-30dBs	(B)	Enregistrer et reproduire un signal de 1kHz dans les conditions précisées en <2>.	(X26-117X-XX) VR3 (G) VR4 (D)	Ajuster les résistances variables de façon à obtenir un niveau de lecture de -27dBs.	

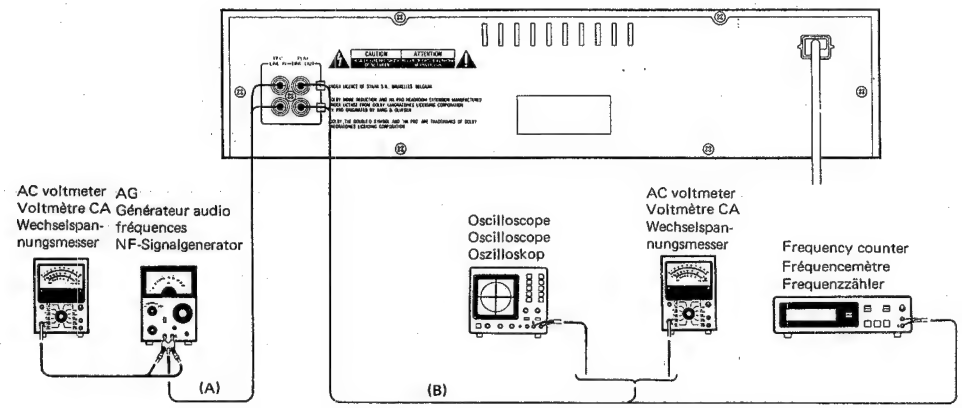
ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	KASSETTENGERÄT-EINSTELLUNG	ABGLEICH PUNKTE	ABGLEICHEN FÜR	ABB.
CASSETTEN-DECK ABTEILUNG		TAPE: NORMAL, DOLBY: OFF, EINGANG: LINE				0dBs=0,775V	
I AUFNAHME/WIEDERGABE-KOPF							
[1]	ENTMAGNETI-SIERUNG	–	–	POWER: OFF Den Kassettenfach deckel oben herausziehen.	AUFNAHME/ WIEDERGABE-Kopf	Entmagnetisierung von dem AUFNAHME/WIEDERGABE-Kopf mit einem Tonkopf Entmagnetisierungsdrossel.	
[2]	REINIGUNG	–	–	PLAY	AUFNAHME/ WIEDERGABE-Kopf Löschkopf, Tonwelle, Andruckrolle.	AUFNAHME/WIEDERGABE-Kopf, Löschkopf, Tonwelle und Andruckrolle mit einem leicht mit Alkohol befeuch teten Wattebausch reinigen.	
[3]	AZIMUT-EINSTELLUNG	(A) MTT-114 10kHz,-10dB	(B)	PLAY	Azimut-Einstellschraube	Maximale Ausgang.	(a)
II GLEICHSTROMMOTOR							
(1)	BANDGESCH-WINDIGKEIT	(A) MTT-111 3kHz	(B)	PLAY	Trimmer potentiometer am Gleichstrommotor	Die Bandgeschwindigkeit so justieren, daß ein 3kHz Signal auf der Mitte des Bands erzeugt wird.	(b)
III GEDRUCKTE SCHALTPLATTE (X26-117X-XX, X87-1190-00)							
<1>	WIEDERGABE-PEGEL	(a) MTT-150 400kHz	(B)	PLAY	(X26-117X-XX) VR1 (L) VR2 (R)	Ausgangspegel: -4,8dBs	
		(b) MTT-256 315kHz				Ausgangspegel: -7,5dBs	
		(c) MTT-256U 315kHz				Ausgangspegel: -3,5dBs	
<2>	LEERLAUFSTROM	(A) 1kHz,-30dBs 10kHz,-30dBs	(B)	REC PEGEL VR (MASTER,PRESET) so justieren, daß der REC Monitor-ausgang -27dBs bei 1kHz wird, und da-nach abwechselnd Signal von 1kHz und 10kHz aufnehmen und wiedergeben.	(X87-1190-00) VR1 (L) VR2 (R)	Den Vormagnetisierungsstrom-Regelwiderstand so einstellen, daß der Wiedergabepegel des 10kHz Signals um +0,5dB höhen ist als der des 1kHz Signals, wenn ein 1kHz Signal und ein 10kHz Signal ab-wechselnd aufgenommen wurde.	
<3>	AUFNAHMEPEGEL	(A) 1kHz,-30dBs	(B)	Ein 1kHz Signal unter den in Punkt <2> beschriebenen Bedingungen aufnehmen und reproduzieren.	(X26-117X-XX) VR3 (L) VR4 (R)	Die Regelwiderstände so justieren, daß ein wiedergabepegel von -27dBs erzielt wird.	

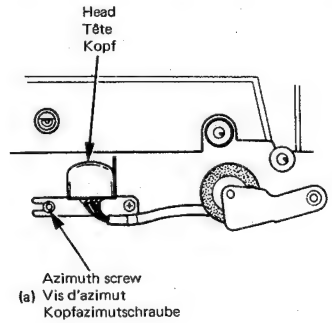
ADJUSTMENT/REGLAGE/ABGLEICH

SYSTEM CONNECTIONS/RACCORDEMENTS DU SYSTEME/SYSTEM-ANSCHLUSSE

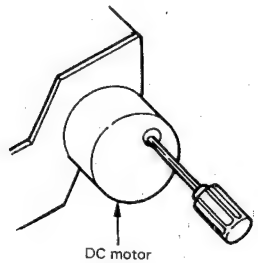
KX-550HX



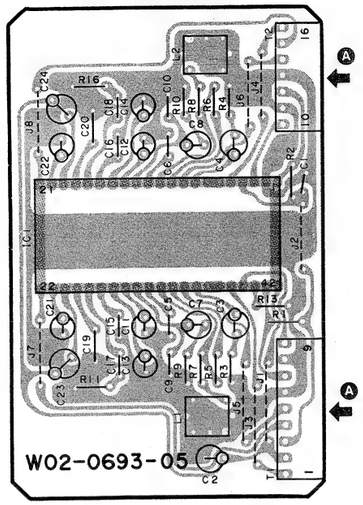
(a) AZIMUTH/AZIMUT/AZIMUT-EINSTELLUNG



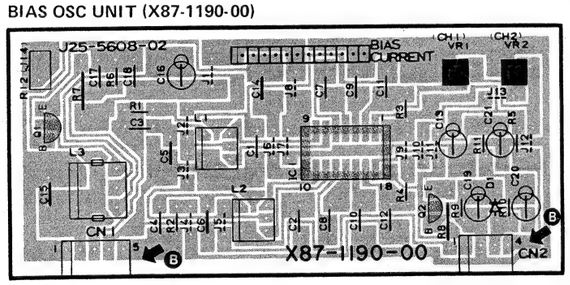
(b) TAPE SPEED/VITESSE DE DEFILEMENT/ BANDGESCH-WINDIGKEIT



DOLBY UNIT (W02-0693-05)

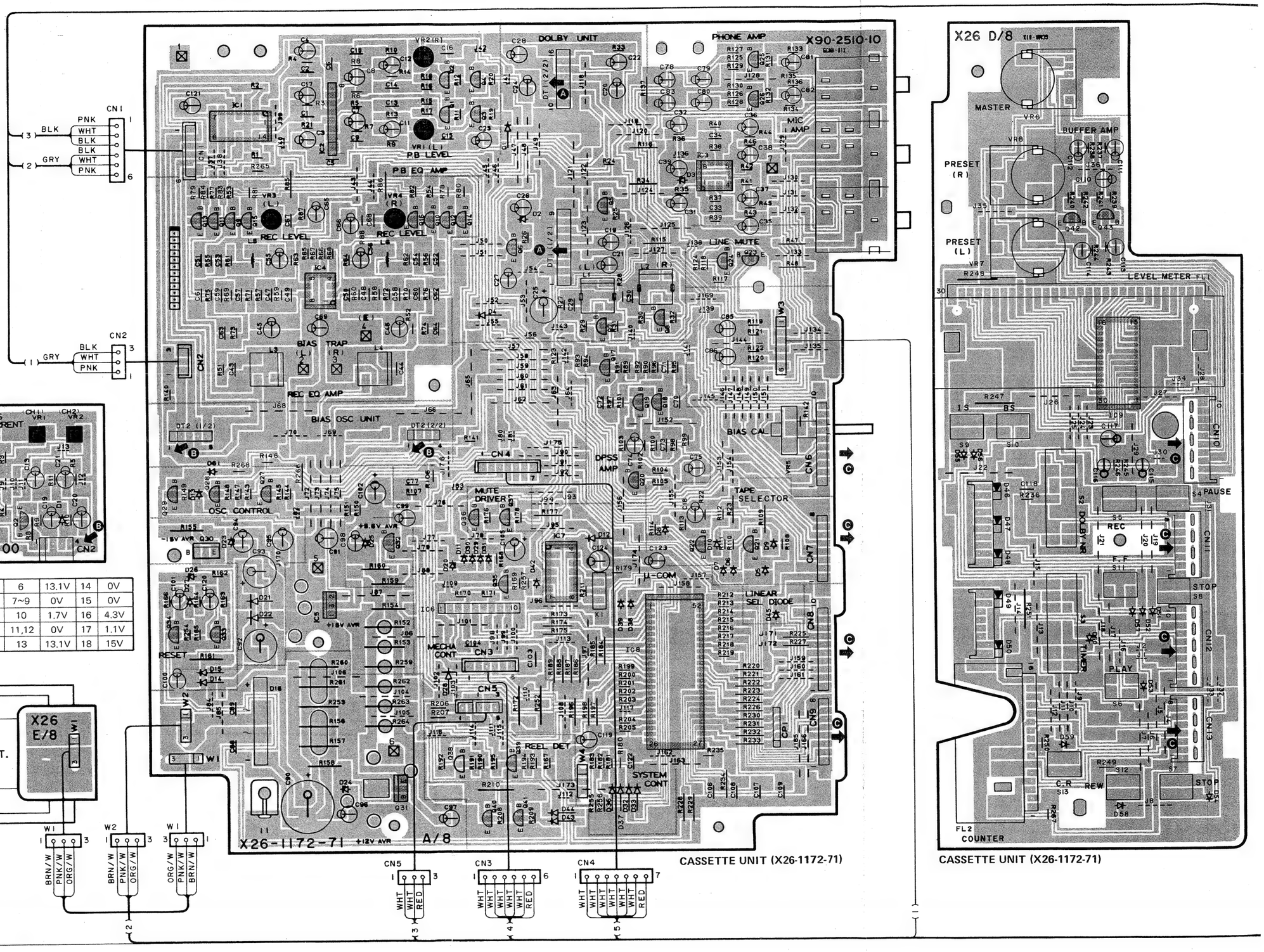


BIAS OSC UNIT (X87-1190-00)



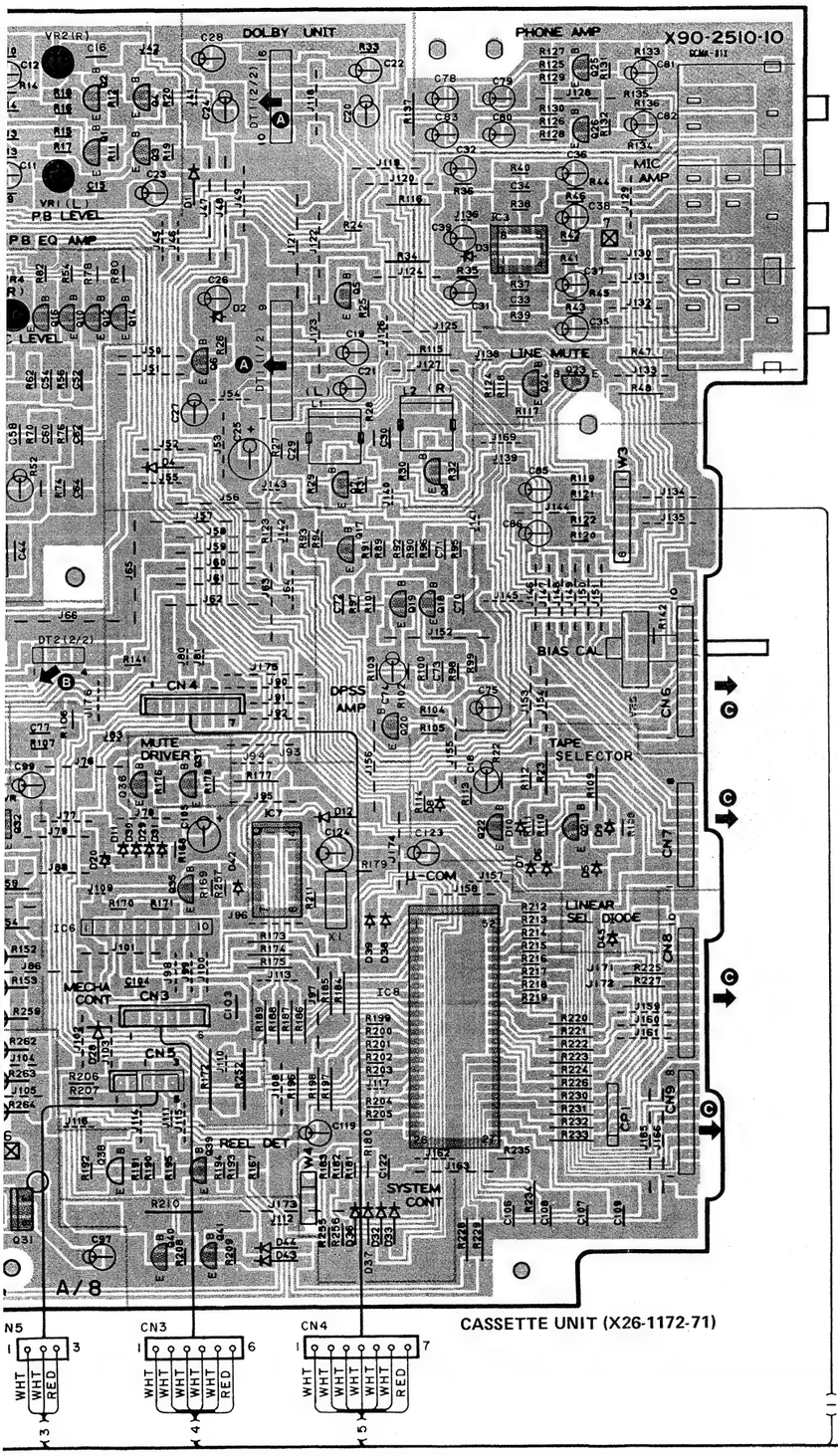
(X87-1190-00)
IC1

1	4.3V	6	13.1V	14	0V
2	1.2V	7~9	0V	15	0V
3	4.3V	10	1.7V	16	4.3V
4	0.4V	11,12	0V	17	1.1V
5	0V	13	13.1V	18	15V

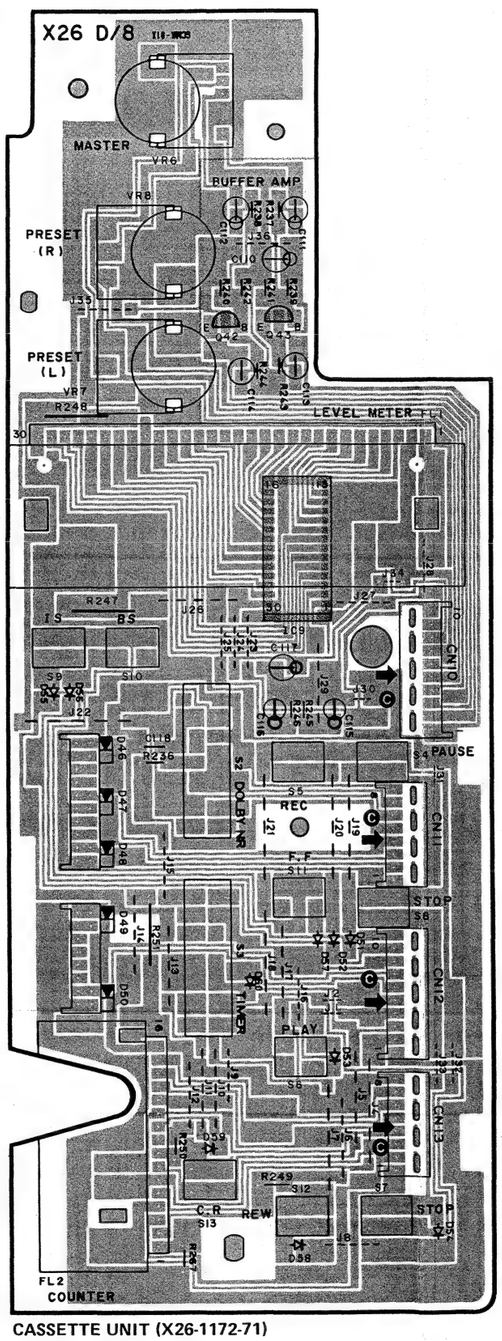


Refer to the schematic diagram for the values of resistors and capacitors.

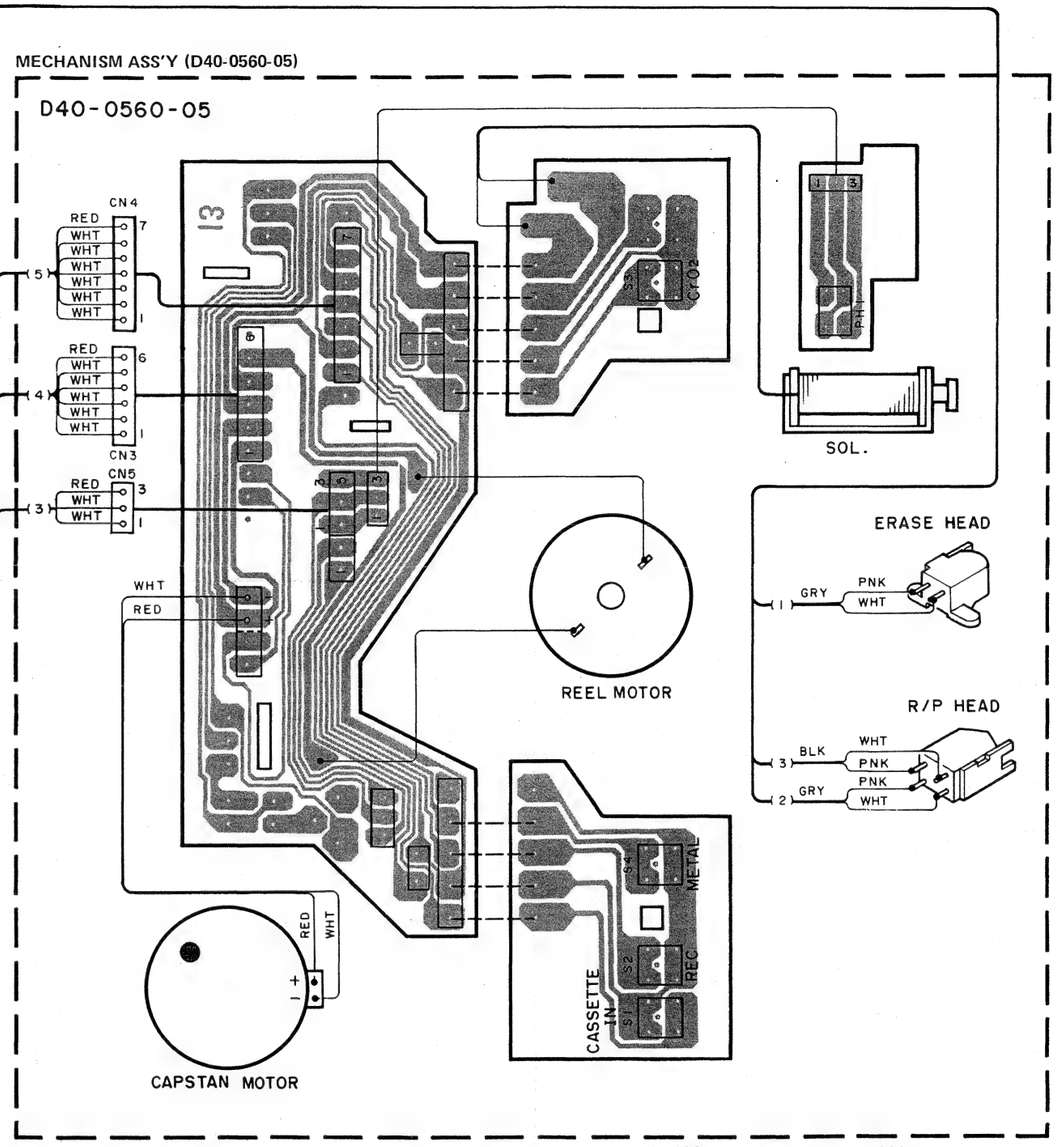
PC BOARD (COMPONENT SIDE VIEW)

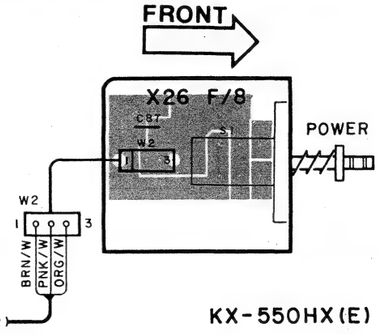


CASSETTE UNIT (X26-1172-71)



CASSETTE UNIT (X26-1172-71)





KX-550HX(E)

(X26-1172-71)

IC2

1	1.3V	4	12V
2	0.8V	5~8	–
3	4.1V		

IC3

1,2	7.8V	8	13.1V
3~7	–		

IC4

1~4	–	7,8	–
5,6	7.4V		

IC6

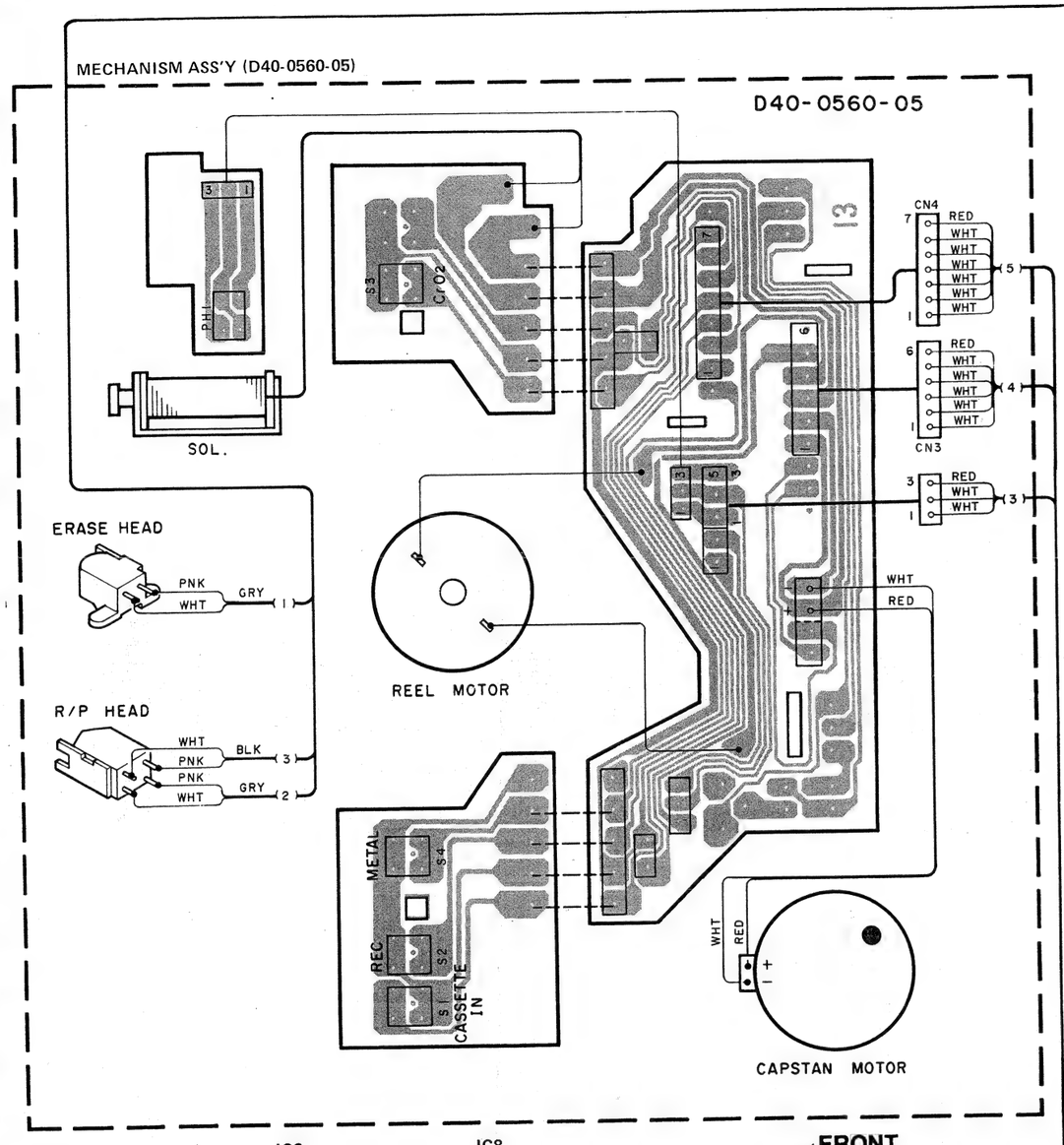
4	FF,REW	: 3.8V
	STOP	: 4.5V
	PLAY,REC	: 2.5V

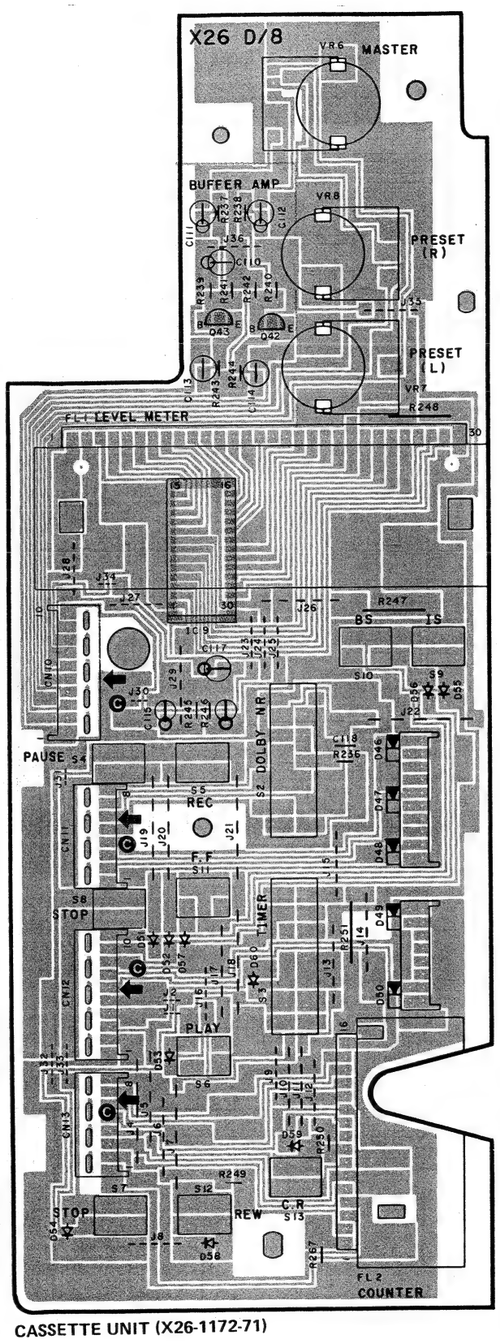
IC8

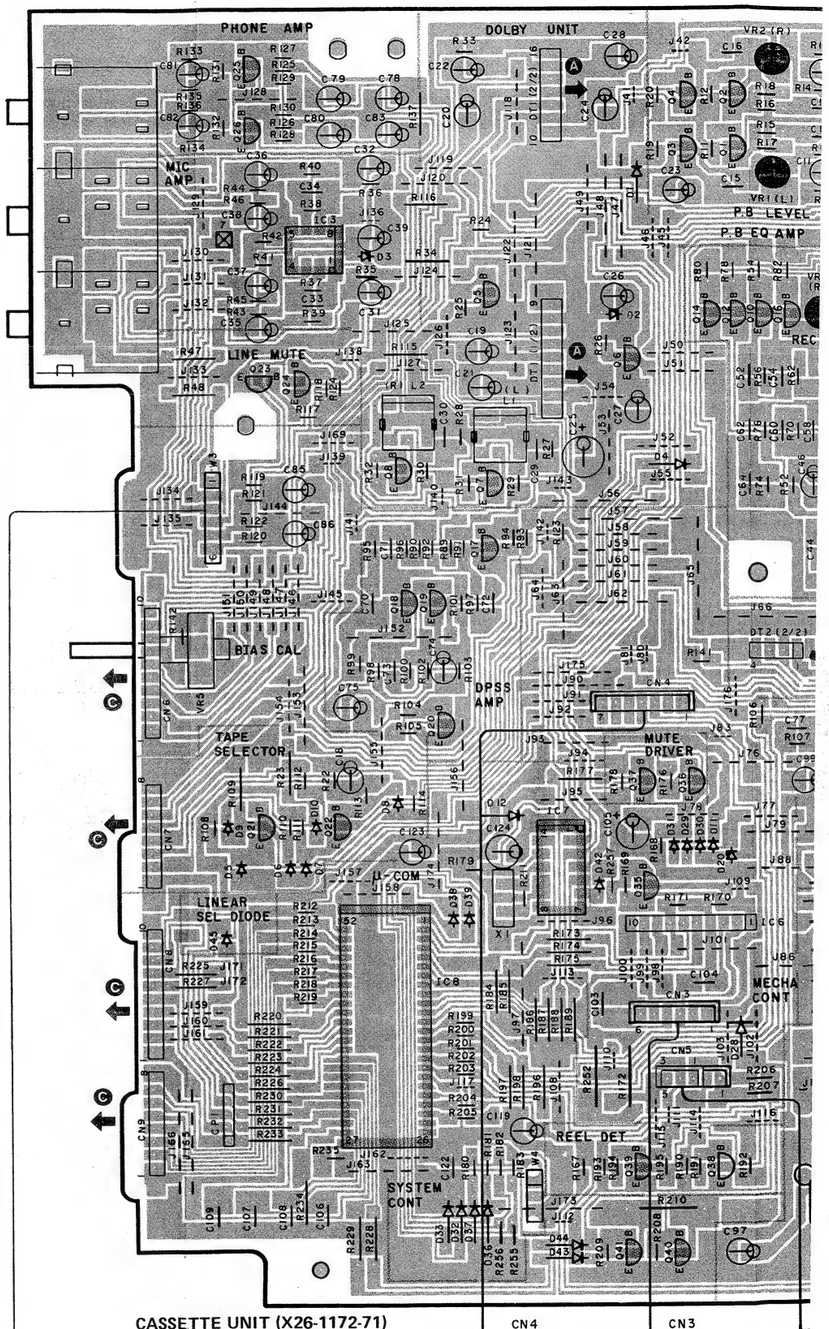
52	5V

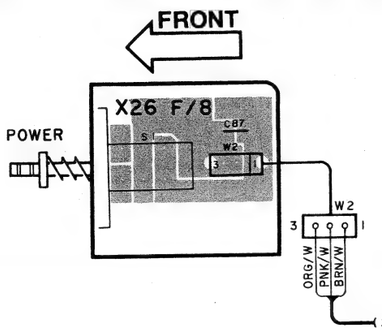
	E	C	B
Q6	–	–	12.9V
Q18	–	–	0.6V
Q19	0.7V	2.8V	–
Q20	5V	–	–
Q25	6.8V	–	7.4V
Q32	5.6V	–	6.2V

PC BOARD (FOIL SIDE VIEW)









(X26-1172-71)

IC2

1	1.3V	4	12V
2	0.8V	5~8	—
3	4.1V		

IC3

1,2	7.8V	8	13.1V
3~7	—		

IC4

1~4	—	7,8	—
5,6	7.4V		

IC6

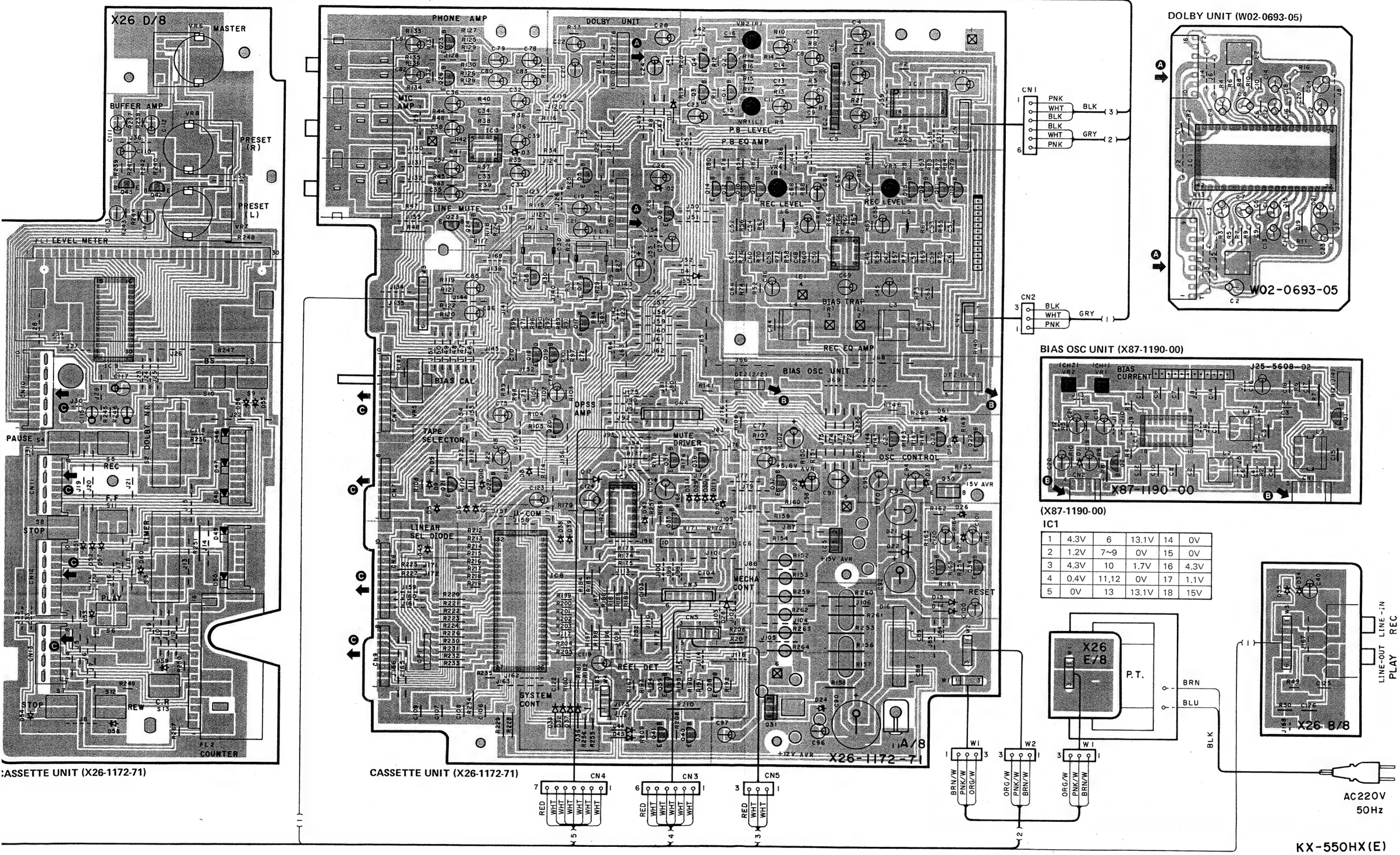
4	FF,REW	: 3.8V
	STOP	: 4.5V
	PLAY,REC	: 2.5V

	E	C	B
Q6	—	—	12.9V
Q18	—	—	0.6V
Q19	0.7V	2.8V	—
Q20	5V	—	—
Q25	6.8V	—	7.4V
Q32	5.6V	—	6.2V

IC8

52	5V

Refer to the schematic diagram for the values of resistors and capacitors.


X26 D/8
MASTER
BUFFER AMP
PRESET (R)
PRESET (L)
FLI LEVEL METER
BS
DOLBY NR
REC
F.F
TIMER
STOP
PLAY
REW
C.R
FLZ COUNTER
PAUSE
PHONE AMP
DOLBY UNIT
MIC AMP
P.B LEVEL
P.B EQ AMP
REC LEVEL
LINE MUTE
BIAS TRAP
REC EQ AMP
BIAS OSC UNIT
BIAS CAL
DPSS AMP
TAPE SELECTOR
MUTE DRIVER
OSC CONTROL
LINEAR SEL DIODE
MECHA CONT
SYSTEM CONT
REEL DET
RESET
+15V AVR
+12V AVR
+5.6V AVR
X26-1172-71
A/8
CASSETTE UNIT (X26-1172-71)
CN1
PNK
WHT
BLK
BLK
WHT
PNK
BLK
GRY
CN2
BLK
WHT
PNK
GRY
DOLBY UNIT (W02-0693-05)
W02-0693-05
BIAS OSC UNIT (X87-1190-00)
BIAS CURRENT
J25-5608-02
X87-1190-00
(X87-1190-00)
IC1
1 4.3V 6 13.1V 14 0V
2 1.2V 7~9 0V 15 0V
3 4.3V 10 1.7V 16 4.3V
4 0.4V 11,12 0V 17 1.1V
5 0V 13 13.1V 18 15V
X26 E/8
P.T.
BRN
BLU
BLK
AC220V
50Hz
X26 B/8
LINE-OUT LINE-IN
PLAY REC
CN4
CN3
CN5
RED
WHT
W1
W2
BRN/W
PNK/W
ORG/W
ORG/W
PNK/W
BRN/W
ORG/W
PNK/W
BRN/W

KX-550HX(E)

(X26-1172-71)
IC 1 : μPC1290C
IC 2 : μPC1228HA
IC 3,4 : AN6556
IC 5 : μPC78M15H
IC 6 : BA6229
IC 7 : M74HCU04P
IC 8 : M50757-403SP
IC 9 : HA12067NT

Q1~5, 7~19, 27~29
33, 34, 39
: 2SC1740S(Q,R)
or 2SC945(A)(Q,P)
Q6 : 2SC2003(L,K)
Q20, 21, 22, 36, 37
: 2SA933S(Q,R)
or 2SA733(A)(Q,P)
Q23, 24 : 2SD1302(S,T)
Q25, 26, 42, 43
: 2SC1845(F,E)

Q31 : 2SD1266(Q,P)
Q32, 35, 40, 41
: 2SD863(E,F)

(X87-1190-00)
IC 1 : μPC1297CA
Q1, 2 : 2SD863(E,F)
D1 : ISS176 or ISS133

MECHA ASS'Y (D40-0560-05)

(X26-1172-71)(A/8)

BIAS OSC UNIT (X87-1190-00)

(X26-1172-71)
D1, 4~13, 27, 29~31
42~44, 51~54, 57, 58, 60, 61
: ISS176 or ISS133
D2, 3, 24 : RD13ES(B2)
or HZS13N(B2)
D14, 15 : ISS178 or ISS131
D16 : RBV-402LFA
D20 : RD5.1ES(B2)
or HZS5.1N(B2)
D28 : DSM1A1
D25 : RD6.2ES(B2)
or HZS6.2N(B2)
D26 : RD8.2ES(B2)
or HZS8.2N(B2)
D46~49 : B30-0431-05
D50 : B30-0432-05

SIGNAL LINE
RECORDING LINE
GND LINE
+B LINE

2SA733(A)
2SC1845
2SC2003
2SC945(A)
2SD1302
2SD863

2SD1266

2SA933S
2SC1740S

M74HCU04P

μPC1290C

AN6556

μPC1228HA

HA12088NT

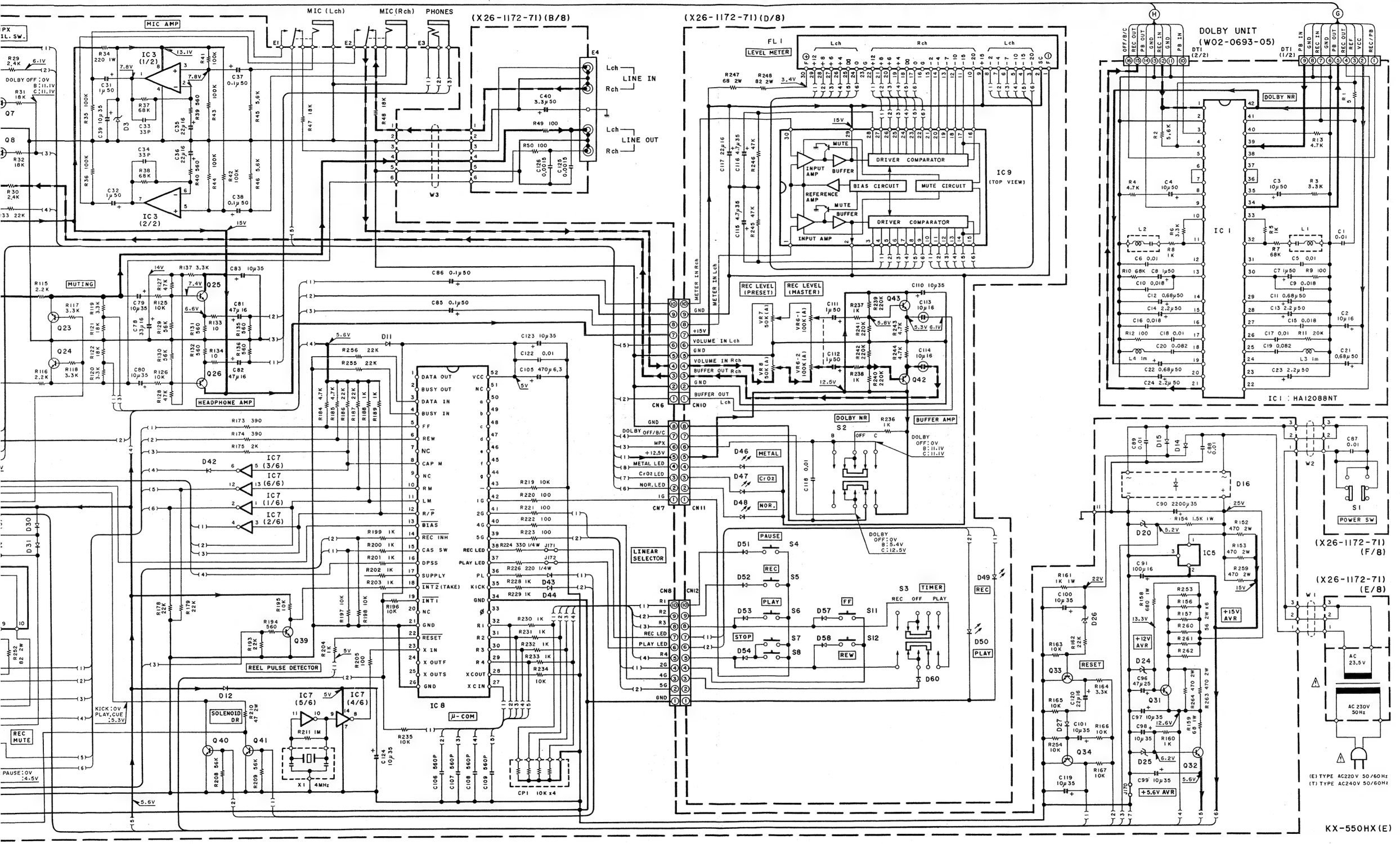
μPC78M15H

BA6229

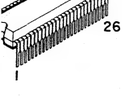
HA12067NT

μPC1297CA

M50757-403SP



403SP 27



26 1

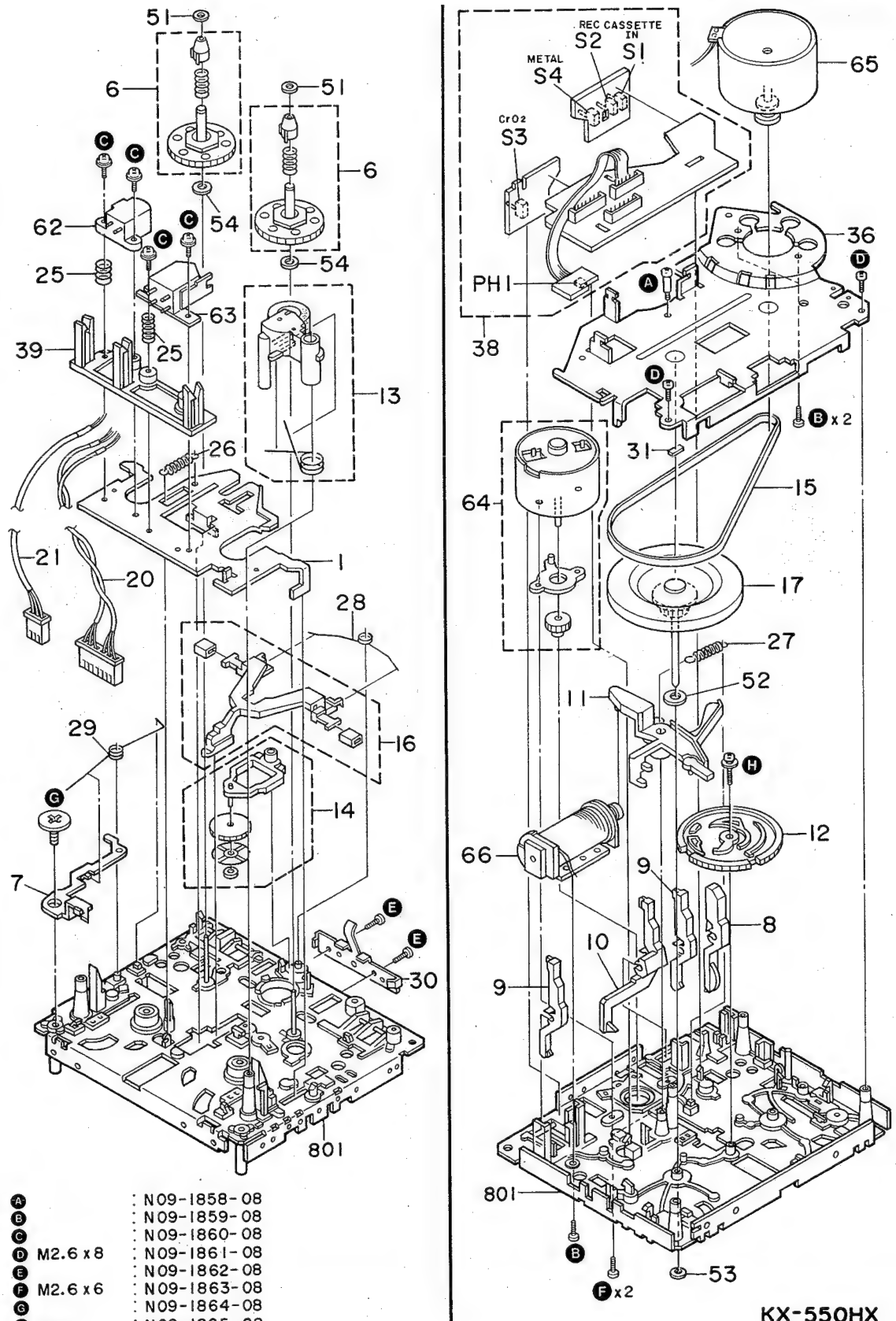
- DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Une cassette étant insérée en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées. l'appareil étant en mode d'enregistrement.
- Die angegeben Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergage mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig. Die angegeben Gleichspannungswerte der Vormagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KX-550HX

KENWOOD

EXPLODED VIEW (MECHANISM)

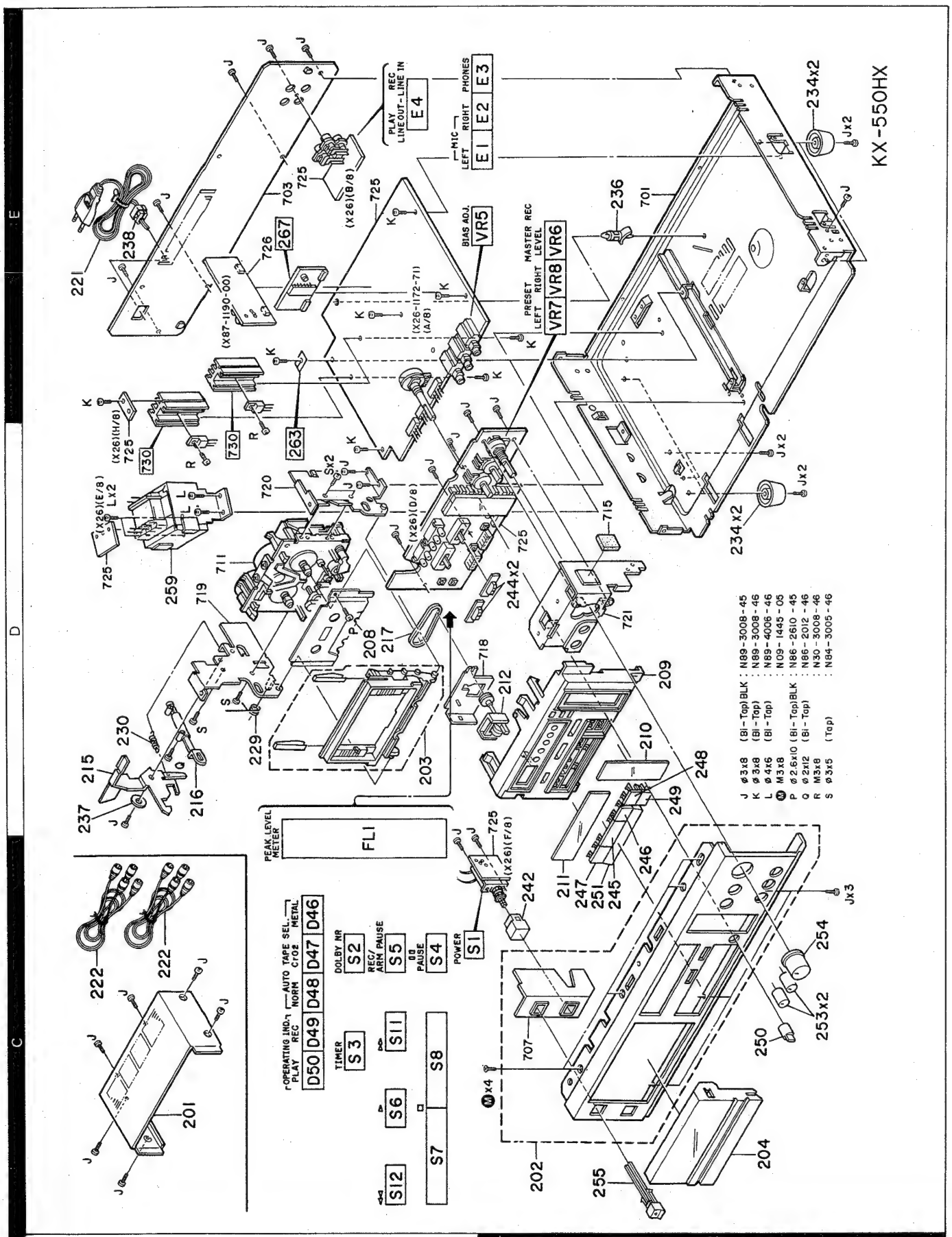


A		: N09-1858-08
B		: N09-1859-08
C		: N09-1860-08
D	M2.6 x 8	: N09-1861-08
E		: N09-1862-08
F	M2.6 x 6	: N09-1863-08
G		: N09-1864-08
H	M2x13	: N09-1865-08

KX-550HX

Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			KX-550HX			
201	1C	*	A01-1547-01	METALLIC CABINET		
202	2C	*	A20-5213-03	PANEL ASSY		
203	1D	*	A53-0926-05	CASSETTE HOLDER ASSY		
204	2C	*	A53-0944-03	CASSETTE LID		
208	1D	*	B03-2286-05	DRESSING PLATE		
209	2D	*	B07-1733-02	ESCUTCHEON		
210	2D	*	B11-0153-04	COLOR FILTER (METER)		
211	2C	*	B12-0060-04	INDICATOR (COUNTER)		
212	2D	*	B35-0038-05	TAPE COUNTER		
-			B46-0122-13	WARRANTY CARD	E	
-			B46-0143-03	WARRANTY CARD	T	
-		*	B50-6684-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B50-6685-00	INSTRUCTION MANUAL(FRENCH)	E	
-		*	B50-6686-00	INSTRUCTION MANUAL(G,D,I)	E	
215	1D	*	D10-1914-03	LEVER (EJECT)		
216	1D		D39-0172-05	DAMPER ASSY		
217	1D	*	D16-0158-04	BELT (TAPE COUNTER)		
⚠ 221	1E		E30-0459-05	AC POWER CORD	E	
⚠ 221	1E		E30-1416-05	AC POWER CORD	T	
222	1C		E30-0505-05	AUDIO CORD		
229	1D	*	G01-2047-04	TORSION COIL SPRING(EJECT)		
230	1D	*	G01-2051-04	EXTENSION SPRING (EJECT)		
-		*	H01-7500-04	ITEM CARTON CASE		
-		*	H10-3409-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-3410-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H11-0009-04	POLYSTYRENE FOAMED BOARD		
-			H25-0224-04	PROTECTION BAG (800X400X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
234	2D,2E		J02-0127-05	FOOT		
236	2E		J19-0514-05	UNIT HOLDER		
237	1D	*	J31-0498-04	COLLAR		
⚠ 238	1E		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
242	2C		K29-2001-04	KNOB ASSY(BUTTON)POWER		
244	2D		K27-1594-04	KNOB (LEVER) TIMER,DOLBY NR		
245	2C		K29-1863-04	KNOB (BUTTON) PLAY		
246	2C		K29-1865-04	KNOB (BUTTON) FF		
247	2C		K29-1866-04	KNOB (BUTTON) REW		
248	2D		K29-1890-04	KNOB (BUTTON) REC/ARM PAUSE		
249	2D		K29-1891-04	KNOB (BUTTON) PAUSE		
250	2C		K29-2201-04	KNOB (BIAS ADJ)		
251	2C		K29-2202-04	KNOB (BUTTON) STOP		
253	2C		K29-2661-04	KNOB (PRESET)		
254	2C	*	K29-2682-04	KNOB (MASTER REC LEVEL)		
255	2C	*	K29-2695-04	KNOB ASSY (EJECT)		
⚠ 259	1D		L01-7872-05	POWER TRANSFORMER		
M	2C		N09-1445-05	SET SCREW (M3X8)		
			CASSETTE UNIT (X26-1172-71)			
D46 -49	1C		B30-0431-05	LED(LN21CPH) AUTO TAPE SEL		

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D50	1C		B30-0432-05	LED(LN31GCPH(U))PLAY		
C1 ,2			CQ09FS1H911J	POLYSTY 910PF J		
C3 ,4			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C5 ,6			CK45FB1H391K	CERAMIC 390PF K		
C7 ,8			CE04KW1A101M	ELECTRO 100UF 10WV		
C9 ,10			CF92FV1H822J	MF 8200PF J		
C11 ,12			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C13 ,14			CF92FV1H183J	MF 0.018UF J		
C15 ,16			CK45FB1H471K	CERAMIC 470PF K		
C17			CE04KW1C330M	ELECTRO 33UF 16WV		
C18			CE04KW1V100M	ELECTRO 10UF 35WV		
C19 ,20			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C21 ,22			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C23 ,24			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C25			CE04KW1A102M	ELECTRO 1000UF 10WV		
C26			CE04KW1V100M	ELECTRO 10UF 35WV		
C27			CE04KW1C470M	ELECTRO 47UF 16WV		
C28			CE04KW1C220M	ELECTRO 22UF 16WV		
C29 ,30			CF92FV1H472J	MF 4700PF J		
C31 ,32			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C33 ,34			CC45FSL1H330J	CERAMIC 33PF J		
C35 ,36			CE04KW1C220M	ELECTRO 22UF 16WV		
C37 ,38			CE04KW1H0R1M	ELECTRO 0.1UF 50WV		
C39			CE04KW1V100M	ELECTRO 10UF 35WV		
C40			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C43 ,44			CK45FB1H471K	CERAMIC 470PF K		
C45 ,46			CE04KW1V100M	ELECTRO 10UF 35WV		
C47 ,48			CC45FSL1H220J	CERAMIC 22PF J		
C49 ,50			CF92FV1H393J	MF 0.039UF J		
C51 ,52			CQ09FS1H561J	POLYSTY 560PF J		
C53 ,54			CF92FV1H272J	MF 2700PF J		
C55 ,56			CE04KW1V100M	ELECTRO 10UF 35WV		
C57 -62			CF92FV1H332J	MF 3300PF J		
C63 ,64			CF92FV1H102J	MF 1000PF J		
C65 ,66			CE04KW1V100M	ELECTRO 10UF 35WV		
C67 ,68			CF92FV1H682J	MF 6800PF J		
C69			CE04KW1V100M	ELECTRO 10UF 35WV		
C70			CF92FV1H392J	MF 3900PF J		
C71			CF92FV1H102J	MF 1000PF J		
C72			CF92FV1H333J	MF 0.033UF J		
C73			CC45FSL1H330J	CERAMIC 33PF J		
C74			CE04KW1C330M	ELECTRO 33UF 16WV		
C75			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C77			CF92FV1H683J	MF 0.068UF J		
C78			CE04KW1C330M	ELECTRO 33UF 16WV		
C79 ,80			CE04KW1V100M	ELECTRO 10UF 35WV		
C81 ,82			CE04KW1C470M	ELECTRO 47UF 16WV		
C83			CE04KW1V100M	ELECTRO 10UF 35WV		
C85 ,86			CE04KW1H0R1M	ELECTRO 0.1UF 50WV		
C87 -89			CK45FF1H103Z	CERAMIC 0.010UF Z		
C90			CE04KW1V222M	ELECTRO 2200UF 35WV		
C91			CE04KW1C101M	ELECTRO 100UF 16WV		
C96			CE04KW1E470M	ELECTRO 47UF 25WV		
C97 -101			CE04KW1V100M	ELECTRO 10UF 35WV		

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C102			CE04KW0J331M	ELECTRO 330UF 6.3WV		
C103,104			C91-0700-05	CERAMIC 0.1UF J		
C105			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C106-109			CK45FB1H561K	CERAMIC 560PF K		
C110			CE04KW1V100M	ELECTRO 10UF 35WV		
C111,112			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C113,114			C90-1332-05	NP-ELEC 10UF 16WV		
C115,116			CE04JW1V4R7M	ELECTRO 4.7UF 35WV		
C117		*	CE04JW1C220M	ELECTRO 22UF 16WV		
C118			CK45FF1H103Z	CERAMIC 0.010UF Z		
C119			CE04KW1V100M	ELECTRO 10UF 35WV		
C120			CE04KW1C220M	ELECTRO 22UF 16WV		
C121			CE04KW1V100M	ELECTRO 10UF 35WV		
C122			CK45FF1H103Z	CERAMIC 0.010UF Z		
C123,124			CE04KW1V100M	ELECTRO 10UF 35WV		
C125,126			CF92FV1H152J	MF 1500PF J		
263	1D		E23-0149-05	TERMINAL		
E1 ,2	1E	*	E11-0175-05	PHONE JACK (MIC)		
E3	1E		E11-0162-05	PHONE JACK(3P) PHONES		
E4	1E		E13-0446-05	PHONO JACK(4P) REC/PLAY		
L1 ,2			L79-0196-05	LC FILTER		
L3 ,4			L39-0125-05	TRAP COIL		
L5 ,6			L40-2238-29	SMALL FIXED INDUCTOR(22MH,G)		
X1			L78-0206-05	RESONATOR (4.000000MHZ)		
CP1			R90-0233-05	MULTI-COMP 10KX4 J 1/6W		
R34			RS14DB3A221J	FL-PROOF RS 220 J 1W		
R152			RS14DB3D471J	FL-PROOF RS 470 J 2W		
R153			RS14KB3D471J	FL-PROOF RS 470 J 2W		
R154			RS14DB3A152J	FL-PROOF RS 1.5K J 1W		
R156			RS14KB3D560J	FL-PROOF RS 56 J 2W		
R157			RS14DB3D560J	FL-PROOF RS 56 J 2W		
R158			RS14DB3A681J	FL-PROOF RS 680 J 1W		
R159			RS14DB3A680J	FL-PROOF RS 68 J 1W		
R161			RS14DB3A102J	FL-PROOF RS 1.0K J 1W		
R172			RS14KB3D820J	FL-PROOF RS 82 J 2W		
R210			RS14DB3D470J	FL-PROOF RS 47 J 2W		
R247			RS14DB3D680J	FL-PROOF RS 68 J 2W		
R248		*	RS14DB3D820J	FL-PROOF RS 82 J 2W		
R252		*	RS14DB3D820J	FL-PROOF RS 82 J 2W		
R253			RS14DB3D560J	FL-PROOF RS 56 J 2W		
R259			RS14DB3D471J	FL-PROOF RS 470 J 2W		
R260			RS14DB3D560J	FL-PROOF RS 56 J 2W		
R261,262			RS14KB3D560J	FL-PROOF RS 56 J 2W		
R263			RS14DB3D471J	FL-PROOF RS 470 J 2W		
R264			RS14KB3D471J	FL-PROOF RS 470 J 2W		
VR1 -4			R12-3097-05	TRIMMING POT.(22K)PB/REC LEVEL		
VR5	1E	*	R01-3041-05	POTENTIOMETER(10KA)BIAS ADJ		
VR6	2E	*	R06-5162-05	POTENTIOMETER(100KA)REC LVL,M		
VR7 ,8	2E	*	R01-4034-05	POTENTIOMETER(50KA)PRESET		
S1	1C		S40-2358-05	PUSH SWITCH (POWER)		
S2 ,3	1C		S31-2091-05	SLIDE SWITCH (TIMER,DOLBY NR)		
S4 -8	1C		S40-1064-05	PUSH SWITCH (TAPE)		
S11 ,12	1C		S40-1064-05	PUSH SWITCH (FF,REW)		

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D1			1SS133	DIODE		
D1			1SS176	DIODE		
D2 ,3			HZS13N(B2)	ZENER DIODE		
D2 ,3			RD13ES(B2)	ZENER DIODE		
D4 -13			1SS133	DIODE		
D4 -13			1SS176	DIODE		
D14 ,15			1SS131	DIODE		
D14 ,15			1SS178	DIODE		
D16			RBV-402LFA	DIODE		
D20			HZS5.1N(B2)	ZENER DIODE		
D20			RD5.1ES(B2)	ZENER DIODE		
D24			HZS13N(B2)	ZENER DIODE		
D24			RD13ES(B2)	ZENER DIODE		
D25			HZS6.2N(B2)	ZENER DIODE		
D25			RD6.2ES(B2)	ZENER DIODE		
D26		*	HZS8.2N(B2)	ZENER DIODE		
D26		*	RD8.2ES(B2)	ZENER DIODE		
D27			1SS133	DIODE		
D27			1SS176	DIODE		
D28			DSM1A1	DIODE		
D29 -31			1SS133	DIODE		
D29 -31			1SS176	DIODE		
D42 -44			1SS133	DIODE		
D42 -44			1SS176	DIODE		
D51 -54			1SS133	DIODE		
D51 -54			1SS176	DIODE		
D57 ,58			1SS133	DIODE		
D57 ,58			1SS176	DIODE		
D60 ,61			1SS133	DIODE		
D60 ,61			1SS176	DIODE		
FL1	1C	*	FGF255CGR	FLUORESCENT INDICATOR TUBE		
IC1		*	UPC1290C	IC(2CH HEAD SWITCHING)		
IC2			UPC1228HA	IC(PREAMP FOR TAPE EQ X2)		
IC3 ,4			AN6556	IC(OP AMP X2)		
IC5			UPC78M15H	IC(VOLTAGE REGULATOR/ +15V)		
IC6			BA6229	IC(MOTOR DRIVER)		
IC7		*	M74HCU04P	IC(HEX UNBUFFERED INVERTER)		
IC8		*	M50757-403SP	IC(MICROPROCESSOR)		
IC9			HA12067NT	IC(FL DRIVER)		
Q1 -5			2SC1740S(Q,R)	TRANSISTOR		
Q1 -5			2SC945(A)(Q,P)	TRANSISTOR		
Q6			2SC2003(L,K)	TRANSISTOR		
Q7 -19			2SC1740S(Q,R)	TRANSISTOR		
Q7 -19			2SC945(A)(Q,P)	TRANSISTOR		
Q20 -22			2SA733(A)(Q,P)	TRANSISTOR		
Q20 -22			2SA933S(Q,R)	TRANSISTOR		
Q23 ,24			2SD1302(S,T)	TRANSISTOR		
Q25 ,26			2SC1845(F,E)	TRANSISTOR		
Q27 -29			2SC1740S(Q,R)	TRANSISTOR		
Q27 -29			2SC945(A)(Q,P)	TRANSISTOR		
Q31			2SD1266(Q,P)	TRANSISTOR		
Q32			2SD863(E,F)	TRANSISTOR		
Q33 ,34			2SC1740S(Q,R)	TRANSISTOR		
Q33 ,34			2SC945(A)(Q,P)	TRANSISTOR		
Q35			2SD863(E,F)	TRANSISTOR		

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KX-550HX

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Q36 ,37			2SA733(A)(Q,P)	TRANSISTOR		
Q36 ,37			2SA933S(Q,R)	TRANSISTOR		
Q39			2SC1740S(Q,R)	TRANSISTOR		
Q39			2SC945(A)(Q,P)	TRANSISTOR		
Q40 ,41			2SD863(E,F)	TRANSISTOR		
Q42 ,43			2SC1845(F,E)	TRANSISTOR		
267	1E		W02-0693-05	ELECTRIC CIRCUIT MODULE		
BIAS OSC UNIT (X87-1190-00)						
C1 ,2			CK45FB1H561K	CERAMIC 560PF K		
C3 ,4			CC45FSL1H151J	CERAMIC 150PF J		
C5 ,6		*	C91-0938-05	POLYSTY 680PF K		
C7 ,8			C91-0700-05	CERAMIC 0.1UF J		
C9 ,10			CK45FF1H223Z	CERAMIC 0.022UF Z		
C11 ,12			CK45FF1H103Z	CERAMIC 0.01UF Z		
C13			CE04KW1V100M	ELECTRO 10UF 35WV		
C14		*	CC45FSL2H100D	CERAMIC 10PF D		
C15		*	CQ93HP2A223J	MYLAR 0.022UF J		
C16			CE04KW1V100M	ELECTRO 10UF 35WV		
C17			CF92FV1H472J	MF 4700PF J		
C18			CF92FV1H272J	MF 2700PF J		
C19			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C20			CE04KW1C470M	ELECTRO 47UF 16WV		
C21			CE04KW1V100M	ELECTRO 10UF 35WV		
L1 ,2		*	L32-0369-05	BIAS OSCILATING COIL		
L3		*	L32-0370-05	OSCILATING COIL		
R7			RD14GB2E100J	FL-PROOF RD 10 J 1/4W		
R8			R92-0219-05	FUSE RESIST 10 G 1/4W		
VR1 ,2			R12-3100-05	TRIMMING POT.(10K)BIAS CURRENT		
D1			1SS133	DIODE		
D1			1SS176	DIODE		
IC1		*	UPC1297CA	IC(DOL HX PRO SYSTEM)		
Q1 ,2			2SD863(E,F)	TRANSISTOR		
DOLBY B/C NOISE REDUCTION UNIT (W02-0693-05)						
IC1			HA12088NT	IC(DOLBY B/C NOISE REDUCTION)		
CASSETTE MECHANISM ASS'Y (D40-0560-05)						
1	2A		A11-0247-08	SUB CHASSIS (HEAD BASE)		
6	1A		D03-0231-08	REEL DISK ASSY		
7	2A		D10-2013-08	ARM (L)		
8	3B		D10-2014-08	LEVER (PACK)		
9	2B,3B		D10-2015-08	LEVER (REC)		
10	3B		D10-2016-08	LEVER (METAL)		
11	2B		D10-2017-08	ARM (PLAY)		
12	2B		D13-0642-08	GEAR (CAM)		
13	1A		D14-0194-08	PINCH ROLLER ASSY		
14	2A		D14-0195-08	IDLER ASSY		
15	2B		D16-0170-08	BELT		
16	2A		D30-0019-08	BRAKE ASSY		
17	2B		D01-0093-08	FLYWHEEL ASSY		
20	2A		E31-4156-08	CONNECTING WIRE(R/P)		
21	2A		E31-4157-08	CONNECTING WIRE(E)		

E: Scandinavia & Europe K: USA P: Canada
U: PX(Far East, Hawaii) T: England M: Other Areas
UE: AAFES(Europe) X: Australia

⚠ indicates safety critical components.

PARTS LIST

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
25	1A		G01-2107-08	COMPRESSION SPRING(AZIMUTH)		
26	2A		G01-2108-08	TENSION SPRING (HEAD BASE)		
27	2B		G01-2109-08	TENSION SPRING (PLAY ARM)		
28	2A		G01-2110-08	TORSION SPRING		
29	2A		G01-2111-08	TORSION SPRING (L)		
30	3A		G02-0454-08	FLAT SPRING (CASSET)		
31	2B		G16-0163-08	SHEET		
36	1B		J21-5101-08	MOUNTING HARDWARE(FW)		
38	1B	*	J25-5707-08	PRINTED WIRING BOARD ASSY		
39	1A		J19-2878-08	HOLDER		
51	1A		N19-0904-08	FLAT WASHER (REEL DISK)		
52	2B		N19-0905-08	FLAT WASHER (Ø2.6)		
53	3B		N19-1091-08	FLAT WASHER		
54	1A		N19-1095-08	FLAT WASHER (REEL DISK)		
A	1B		N09-1858-08	SCREW		
B	1B,3B		N09-1859-08	SCREW		
C	1A		N09-1860-08	SCREW (F LOCK)		
D	1B		N09-1861-08	SCREW (M2.6X8)		
E	3A		N09-1862-08	SCREW		
F	3B		N09-1863-08	SEMUS SCREW (M2.6X6)		
G	2A		N09-1864-08	STEPPED SCREW		
H	2B		N09-1865-08	SCREW (M2X13)		
S1 -4	1B		S90-0105-08	SLIDE SWITCH		
62	1A		T32-0015-08	ERASE HEAD		
63	1A		T34-0324-05	REC/PLAY HEAD		
64	2B		T42-0440-08	REEL MOTOR ASSY		
65	1B		T42-0441-08	MOTOR ASSY (MAIN)		
66	2B		T94-0201-08	SOLENOID		
PH1	1B		GP2S09B	OPTO ISOLATOR		

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⚠ indicates safety critical components.

KX-550HX

SPECIFICATIONS

Type..... Front Loading Stereo Cassette Deck with Dolby B · C NR System
Track System..... 4-Track, 2-Channel Stereo/Mono, Recording/Playback
Recording System..... AC Bias System (Bias Frequency: 85 kHz)
Erasing System..... AC System
Tape Speed..... 4.76 cm/sec (1-7/8 ips)
Heads..... Record and Playback Head x 1 (Hard Permalloy)
Erase Head x 1 (Double Gap Ferrite)
Motors..... Capstan Drive: Electronic Controlled DC Motor
Reel Drive: DC Motor

Fast Winding Time..... Approx. 90 seconds with C-60 tape
Frequency Response:
Normal Tape..... 20 Hz to 16,000 Hz, ± 3 dB
CrO_2 Tape..... 20 Hz to 17,000 Hz, ± 3 dB
Metal Tape..... 20 Hz to 18,000 Hz, ± 3 dB
Signal to Noise Ratio:
Dolby C Type NR ON..... 74 dB (Metal Tape)
Dolby B Type NR ON..... 67 dB (Metal Tape)
Dolby NR OFF..... 59 dB (Metal Tape)
Harmonic Distortion..... Less than 0.9% (at 1 kHz, 0 VU with Metal Tape)
Wow and Flutter..... 0.06% (W.R.M.S.)
0.16% (DIN)
Input Sensitivity/Impedance:
LINE x 2..... 77.5 mV/50 k ohms
Microphones x 2..... 0.35 mV/600 ohms
Output Level/Load Impedance:
LINE x 2..... 0.35 V (0 VU)/2 k ohms
Headphones x 1..... 0.3 mW/8 ohms

Power Consumption..... 35 watts
Dimensions..... **W**: 420 mm (16-9/16")
H: 113 mm (4-7/16")
D: 326 mm (12-13/16")
Weight (Net)..... 5.0 kg (11.1 lb)
Reference Tapes..... Normal: KENWOOD ND-60
CrO_2: KENWOOD CD-60
Metal: KENWOOD MD-60

Note :

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD CORPORATION
Shionogi Shibuya Building, 17-5, 2-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD U.S.A. CORPORATION
2201 East Dominguez Street, Long Beach, CA 90810;
550 Clark Drive, Mount Olive, NJ 07828, U.S.A.
KENWOOD ELECTRONICS CANADA INC.
P.O. Box 1075 959 Gana Court, Mississauga, Ontario, Canada L4T 4C2
KENWOOD ELECTRONICS BENELUX N.V.
Mechelsesteenweg 418 B-1930 Zaventem, Belgium
KENWOOD ELECTRONICS DEUTSCHLAND GMBH
Rembrücker-Str. 15, 6056 Heusenstamm, West Germany
TRIO-KENWOOD FRANCE S.A.
Hi-Fi·VIDEO·CAR Hi-Fi
13, Boulevard Ney, 75018 Paris, France
TRIO-KENWOOD U.K. LTD.
17 Bristol Road, The Metropolitan Centre, Greenford, Middx. UB6 8UP England
KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.
4E Woodcock Place, Lane Cove, N.S.W. 2066, Australia
KENWOOD & LEE ELECTRONICS, LTD.
Wang Kee Building, 5th Floor, 34-37, Connaught Road, Central, Hong Kong